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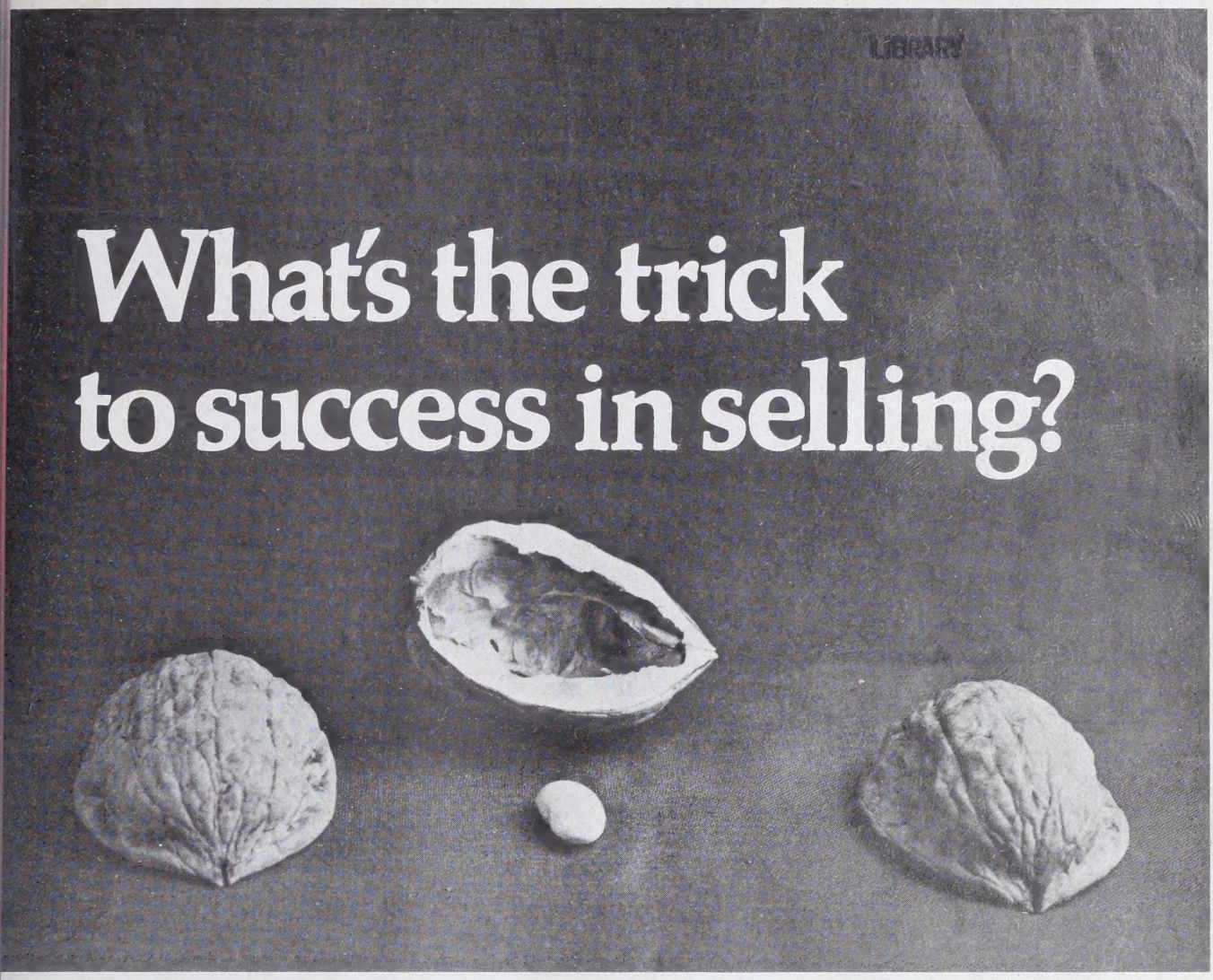

here is no trick to successful elling. Selling isn't a game of hance nor a contest of wits. 's a profession — a tough ne — where it's smarter in e long run to make a new ustomer than just to make sale. Top producers know at you get the best results y using proven selling echniques.

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Communication Concepts from the Bell System:

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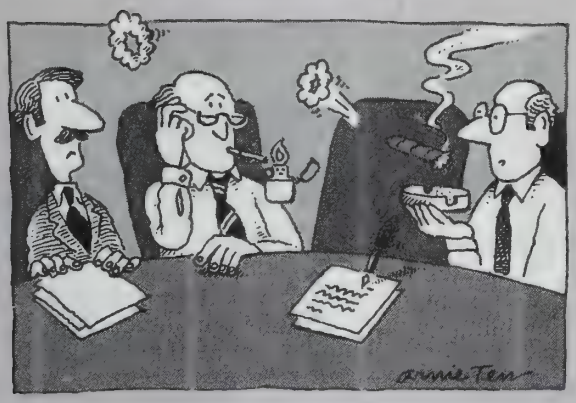

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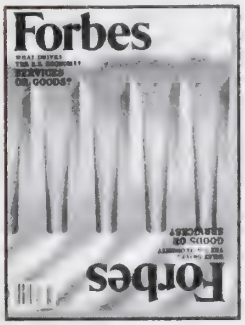
Communication Concepts from the Bell System

Expanding your ability to communicate.

April 11, 1983
Volume 131,
Number 8



142 "You mean the U.S. has been a service economy all these years and I didn't know it?"

41 Baldwin-United: The net of the uncertainties.

51 A story that should send chills through the hearts of executives.

39 Steel:
Behind The Rah-Rah At Weirton
Should the taxpayers help employees acquire West Virginia's largest employer?

41 Companies:
Baldwin-United
Is the old piano company turned financial services conglomerate in a cash bind?

42 Energy:
Leaded Gas Stages A Comeback
This may be the EPA's next hot potato.

43 Companies:
Tandy
The pioneer of personal computers faces heavy competition.

44 Investments:
The Kids In The Pits
What are all those clean-cut young people doing in a place like this?

46 The Cities:
Yonkers Versus United Technologies
"We've declared war!"

50 The Streetwalker:
Merrill Lynch In The China Shop
The thundering herd gets a little too aggressive. Also: Overseas Shipholding; oil service stocks; Superior Oil; Sir Jimmy Goldsmith.

51 On The Docket:
Software Nightmare; Patent Absurdities
Computers create a quagmire; why patents are worthless for many small companies.

54 Companies:
American Motors
One swallow doesn't make a summer.

59 Companies:
M/A-Com, Inc.
After the fall, more of the same.

62 Companies:
Washington Federal S&L
Not a bad business, if you do it right.

66 Companies:
Pep Boys
The "heirs" of Manny, Moe & Jack.

68 Companies:
Lomas & Nettleton Financial Corp.
How to make mortgages and sleep soundly.

70 Companies:
Universal Leaf Tobacco Co.
Gordon Crenshaw may be the calmest executive in the business. And for good reason.

93 The Up & Comers:
Thousand Trails
"The goddamn chairman is fouling it up," said Milt Kuolt. So he gave up the chairman's job. Also: Toll Brothers; General Housewares; RG Dynamics Inc.

108 The Numbers Game:
Once And Future Income
On utility books, business is good already.

110 Companies:
National Service Industries
Its secret weapon is no secret at all.

115 Defense Spending:
The F/A-18 Flap
The wrong reasons, the right plane.

120 Taxing Matters:
Hard Questions About Software
Is the IRS discouraging innovation?

124 Companies:
Tracor
It has both glitter and substance. But substance pays better.

128 Special Report:
1983 Annual Banking Survey
Performance and outlook for the nation's 100 largest bank holding companies, 50 largest trust operations and 25 biggest S&Ls.

142 Cover Story:
The Myth Of "Reindustrialization"
It's a little late to be discussing the consequences of the U.S.' becoming a service economy. It has been one for 40 years.

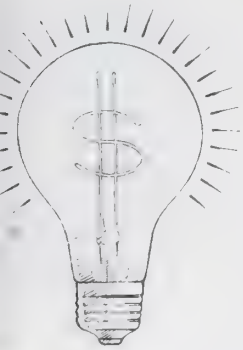
149 Utopias:
They Have Seen The Future
Yesterday's visions of tomorrow.

155 Technology:
The Killer Bees Live
The U.S. honey industry is anything but the bee's knees these days. Also: the sleep disease; genetic screening; MSA.

166 Companies:
Harte-Hanks Communications, Inc.
Not Texas swashbucklers, but tough competitors in a changing industry.

70 *For a fellow who doesn't know what he is doing, he gets along okay.*

96 *"We are merchandisers. When the other guy doesn't sell it, we can."*



108 *The Numbers Game: Nice-guy accounting that is really not that nice*

200 *Sequoia Fund: "There are limits to what you can do with a lot of money."*

170 Natural Gas:
Diplomacy Proposes, Market Disposes
Russia's diminishing prospects for getting convertible currency from her natural gas.

172 Personal Affairs:
Walking: The Newest Health Craze
Recreational walking is as old as Socrates, but it's undergoing a vogue. Also: consumer interest rates; Crown loans and Clifford trusts; Oklahoma City's Skirvin Plaza Hotel.

Faces Behind The Figures

180 Alex Brainard,
Consolidated Cigar
180 Harry Helmsley,
Helmsley-Spear
181 Ulf Lantzke,
International Energy Agency
182 Keith Wickenden,
Airship Industries
182 Michael Garin and Michael Solomon,
Telepictures Corp.
184 Paul Bergmoser,
Statue of Liberty campaign

190 Statistical Spotlight:
How Long, O Lord?
Oil stocks have been slipping out of favor for nearly three years. Any signs of a turnaround?

194 Companies:
Rosenberg Real Estate Equity Funds
These days you would think that bricks and mortar would be very much out of favor. So why does RREEF feel so bullish about the future of real estate?

196 Investments:
Doesn't Anyone Remember Fred Carr?
Here comes yet another new fund for investing in hot little stocks.

198 Companies:
Convergent Technologies
A clear and simple concept, with a salesman's drive behind it.

200 The Funds:
Sequoia Turns Off The Tap
Why did William Ruane and Richard Cunniff close their fund to new investors?

Money And Investments

33
What's Ahead For Business
34
The Forbes Index
187
The Forbes/Wilshire 5000 Review

Columnists

205
Ben Weberman
206
Ashby Bladen
208
Stanley W. Angrist
210
Srully Blotnick
212
Thomas P. Murphy
214
Stephen E. Roulac

Departments

6
Side Lines
8
Trends
16
Follow-Through
20
Readers Say
25
Fact and Comment
28
Other Comments
31
Fact and Comment II
218
Editorial Index
219
Flashbacks
220
Thoughts

Photos:
8, 46, Joyce Ravid; 12, 150, Bettmann Archive; 26, Eeva-Inkeri; 39, Harry Schaefer/Black Star; 41, Tom Hubbard/Black Star; 43, 70, 181, Eric Poggenpohl; 45, Peter Tenzer; 50, Wide World Photos; 62, 93, 180 bottom, Doug Wilson/Black Star; 66, 100, Joe McNally/Camera 5; 69, 166, Shelly Katz; 98, 182 bottom, 196, 202, Fred DeVan; 104, 180 top, Wm. Franklin McMahon; 110, Bill Grimes/Black Star; 115, Herman Kokojan/Black Star; 124 right, Ben Weaver/Camera 5; 149, Lucas Cranach/Granger; 152 clockwise, Culver Pictures, Bettmann Archive, Bettmann Archive, Bettmann Archive; 155, Memory Shop; 164, Chuck Rogers/Black Star; 172, 174, 178, Michael Abramson; 179, Ed Lallo/Black Star; 182 top, Sally Fear; 184, Bill Kelly; 194, Ed Kashi/Liaison; 198, Thomas Lea

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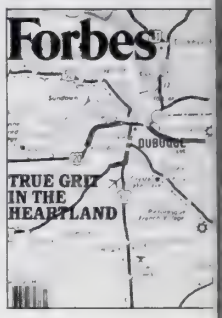
Side Lines

The media and the economy

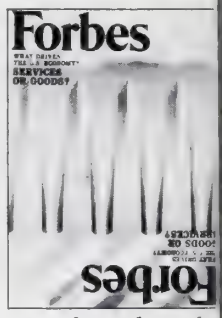
Jerry Flint, author of our cover story on Dubuque's tough but succes ful battle for economic survival *(Mar. 28)*, was pleased to get a no from Stephen Kent, executive editor of Dubuque's local newspape the *Telegraph Herald*. We quote: "I couldn't agree more thorough with the thoughts expressed in your intro identifying the problems journalism's coverage of the economy."

Thanks, Editor Kent. What we said—and what Kent was agreei with—is that the print and TV media are doing a lousy job covering tl economy. They revel in hard luck stories and scares. They mostly igno the energy and creativity of a system that has come through a terrib rough recession, while maintaining total employment at close to record levels and spawning whole new industries.

Concentrating on bad news may jerk tears and sell papers but it misleads. When you are a business publication whose readers base decisions on your information, you won't keep your readers if you consistently mislead them. No question about it: Our economy is going through tremendous changes, many of them painful. But we don't see it as the decline of America. In our issue of Nov. 22, 1982 we saw it as "The molting of America." Last issue we visited Dubuque and found it, not an industrial wasteland, but a lively if somewhat chastened place. In this issue Executive Editor Jim Cook deals with the canard that our emergence into a service economy is a bad thing. It is no more a bad thing, he says, than our earlier transformation from a farm economy to an industrial economy. Cook's latest report, "You mean we've been speaking prose all these years?" starts on page 142.



You will also want to read Howard Banks' article on Weirton, W. Va. in this issue. You have seen and heard about the terrible cutbacks in the Weirton steel plant and about the employees' efforts to buy it. But did you know that some of the plant's workers were earning $65,000 a year? Or that there's scarcely an old car to be seen on the streets of Weirton? See page 39.



What are we saying in these different but related articles? Just this: that the latest recession has been more in the nature of a massive readjustment in our society than it has resembled the Great Depression. The recent downturn has not blighted an unprecedented crop of new enterprises and new technologies; jobs are being created nearly as fa as old ones are being wiped out. It is no mere anomaly that in spite the big jump in unemployment, the American public's overall buyin power has actually risen in 1981-1982. We at Forbes are trying to pu all these things together. We are saying that you cannot understand i isolation either the service-technology boom or the decline in heav industry. In short, the American bottom line is a lot healthier than th media present it. The country is not going to hell. Socialism, no capitalism, is the discredited ideology. This realistic optimism is th underlying theme in all these stories. The United States of Americ age 206, for all its faults and its ailments, is still bursting with vitalit

James W. Michaels
Editor

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Trends

Edited by John A. Conway

Power on Main Street

Spending for energy can make or break a small town, says Gary Coates, associate professor of architecture at Kansas State University. With 16 students in an urban design class, Coates studied the energy spending of Marysville, Kans. and found last year the town of 3,700 paid $2.4 million for energy and kept only $321,000—less than 1%—in the community. The average Marysville household income is $22,000; more than 7% of that, or $1,600, goes for energy. If household income rises 5% a year, and energy costs 10%, Coates says, the average Marysville energy bill would hit $24,000 (or 45% of gross household income) by the year 2000. If Marysville conserved, he says, the community could reduce its energy use 62% by then; spending on energy would then drop to an average 16% of household income. Even a modest conservation program, he estimates, would produce 201 one-year jobs and 15 permanent jobs in town. "Small communities like Marysville have a much better chance than large cities to make the transition to renewable energy sources," Coates says. He recommends solar retrofitting, self-reliant neighborhood development and energy-efficient transportation, among other things, to reduce small-town energy costs.

Here come the toys

Children love nothing more than good cartoon characters, as evidenced by the current craze for the Smurfs, Belgium's cartoon import. Now, homegrown characters like Mickey Mouse and Snoopy will have more competition—from the Japanese. Tokyo's Sanrio Co. is bringing its characters to the U.S. Hello Kitty (a cat), My Melody (a rabbit) and Little Twin Stars (twins) are now licensed to go into or onto books, toys, towels, shoes, T-shirts and even hair ribbons for sale here and in Mexico and Canada. The largest potential licensee for Sanrio is CBS Toys, which already plans a 24-item line of Hello Kitty toys. Children can now buy Hello Kitty stuffed animals and will soon be able to add musical televisions, picnic sets, lunch boxes, toy chests and the like to their collections. CBS is also working on My Melody and Twin Stars toys. Random House began selling Hello Kitty books last year and has had such success that it is also adding to the line. The Japanese newcomers are most popular with little girls, but Sanrio doesn't plan to stop there: The company has also been test-marketing a new character, Tuxedo Sam (a penguin), for boys.

Chinese expectations

China's new and minuscule middle class loves TV but couldn't care less about refrigerators, according to what may be the first consumer study there. Polling 150 middle managers in northern China, business professor Hans Thorelli of Indiana University found that 75% owned TV sets but only 8% had refrigerators. (Only about 5% of the Chinese own a TV, Thorelli adds.) All owned wristwatches, 87% had sewing machines, 84% had bicycles, but none had cars or telephones. Five out of six of his respondents earned more than the $1,200 per year that is the averag income in China. Thorelli also foun that most Chinese preferred foreig appliances. Chinese buy food at eith state stores or farmers' markets, H says, and almost unanimously "e press great disdain for the service the state store." (The latter's monop ly of rationed foods like rice and cool ing oil keeps them in business.) Th Chinese, surprisingly, had kind word for advertising: 99% believed that ad vertising was essential; 90% said ad provided wide information abou products; 40% thought ads presente an accurate picture of products. Mor than 75% were either not sure or de nied that advertising pushed people t buy things they did not need or shoul not buy; that opinion could change more goods were available in China.

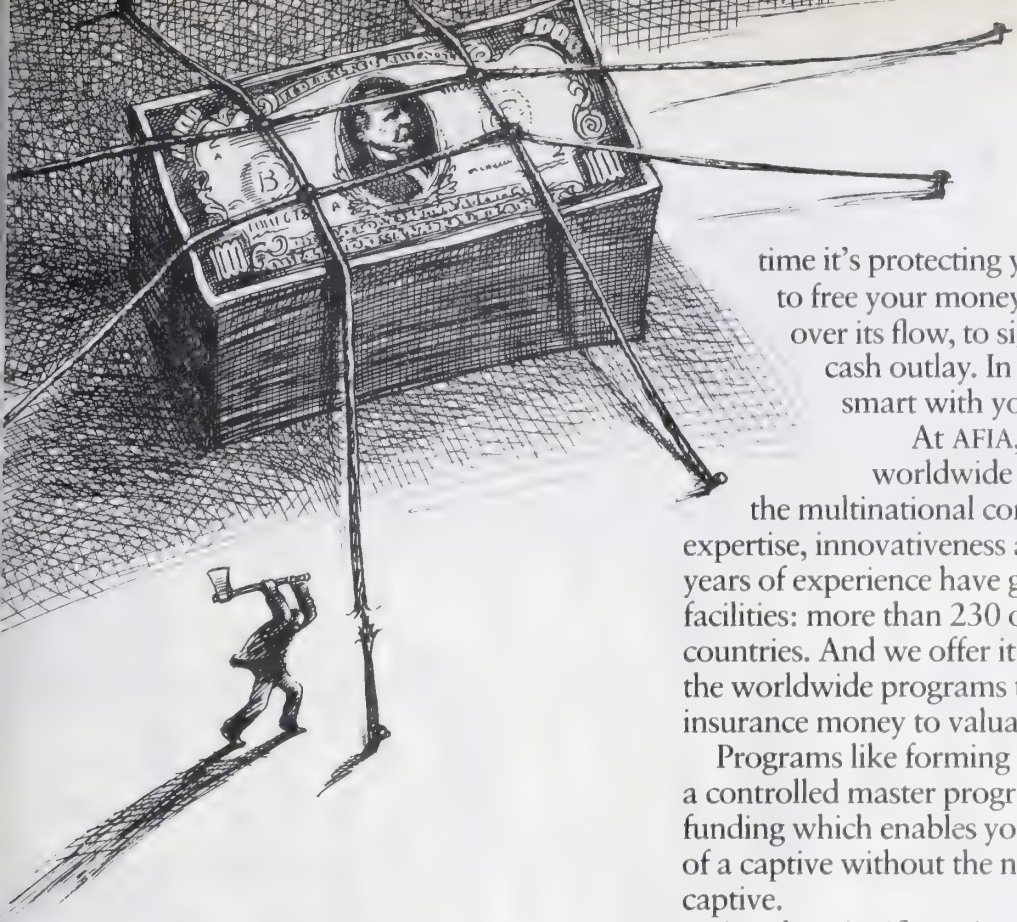
Hello Kitty stuffed toys
Competition for homegrown favorites.

Handmade humans

The $6 million man is here, or close Every year, 2 million to 3 millio Americans have artificial parts im planted, says Blue Cross/Blue Shield It's now a $1 billion business. Th most recent breakthroughs includ artificial kidneys, pancreases, knees skin and tongues. "By 1996, a mara thon runner equipped with a superef ficient artificial heart might be dis qualified because he had an unfair ad vantage," says Dr. Willem Kolff inventor of the artificial kidney. Lead er in spare body parts is Dow Corning Wright (sales roughly $20 million to $30 million) of Arlington, Tex., and the list of bionics continues to grow It's now possible to fashion wrists, shoulders, hips, fingers, ankles, toes, corneas, heart valves, arteries and veins, bladders and intestinal walls.

The wandering TV eye

Television commercials aren't as effective as they used to be, says the Newspaper Advertising Bureau, with obvious relish. A study by Burke Marketing Research found the number of viewers able to identify any commercial seen in the previous five minutes fell from 18% in 1965 to 12% in 1974 and to 7% in 1981. Writing in the current *Journal of Advertising Research*, Bureau General Manager Leo Bogart says the number of network commercials per week increased from 1,856 to 4,079 between 1967 and 1981, while the standard plug fell from one minute to 30 seconds (that doesn't include promotional and public service announcements). TV ads may be less



There may be better things to do with your company's insurance money than buy insurance.

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We would like to recommend an alternative. Rather than think of all that money as an expense for your company, we suggest you think of it instead, as a financial tool.

That's right, as a financial tool. There are so many ways, today, to make your insurance money work for your company at the same time it's protecting your company. Ways to free your money, to give you control over its flow, to significantly lower your cash outlay. In short, ways to be smart with your insurance money.

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Programs like forming your own captive. Or a controlled master program with deductible funding which enables you to derive the benefits of a captive without the necessity of forming a captive.

Another significant innovation is global insurance, one program that covers you both in the United States and abroad and has the effect of increasing your insurance buying power significantly and providing greater control of your risk management program.

Those are a few brief examples of how insurance can be made to work for companies today. To be sure, there are others: high deductibles, other cash flow programs, rating plans and unbundling of services (that is, paying for only the insurance services you need) to name but a few.

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Meeting Japan's Challenge
Fourteenth in a Series

WHEN JAPAN WAIVES THE RULES, JAPAN RULES THE WAVES.

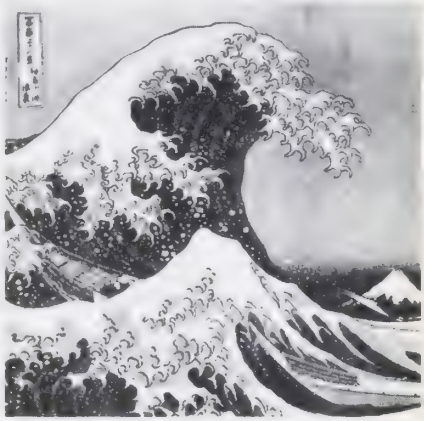
To many people, Japan is a land of cherry blossoms, gentle ways, and lifetime os. There is some truth in that.

But, Japan is also the land of a style of industrial expansion which has anged the rules of free market trade.

The very term "free market" is an anomaly in Japan. While Japanese arketers are free to sell their goods in this country almost without restriction, any American and European goods have been virtually locked out of Japan.

Western industrialists prefer world commerce under regulations that permit dividual companies to compete separately for markets.

But, over two decades ago, Japan added the factors of centralized planning, nancing, and control aimed at worldwide domination of certain industries. So, stead of individual companies engaging in market-determined competition, we ave had a lop-sided situation. The government of Japan has directed and motivated e moves of selected companies like pieces in a giant ess game.



Once preselected companies have been assigned eir roles, little national effort is spared to assist in the mpletion of their international missions. The government orchestrates; research is combined, and subsidies ound. Preferential loans are granted. Prices, specifications and standards have been collectively determined. artels can be, and are, formed.

These tactics, permitted by the government of Japan, ould be considered illegal for American companies to engage in here. By targeting industries, Japanese firms are, in fact, selectively exempted from Japan's anti-onopoly laws.

How can the single American or European company compete? We have been elling out some of the ways. But it is virtually impossible for many companies combat these combined resources with traditional independent company efforts.

Make no mistake. Japan has not grown to the world success it is, by the rmal "every-company-for-itself" rules of western business. Their industrial progess is substantially the result of extreme protectionism at home and collective forts permitting targeting abroad. And it is folly to assume that this is a temporary ndition. Japan's arrangement is ongoing.

Japan has waived our rules for the past 25 years. If America and the western orld continue to do nothing about it, Japan may go on to rule the waves for the ext 25 years, and longer.

MOTOROLA A World Leader in Electronics.

Quality and productivity through employee participation in management.

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effective, Bogart adds, because more viewers are prone to let their attention wander. In 1965, he says, only 28% of TV watchers busied themselves with something else while glued to the tube: That number rose to 40% in 1981.

Catch 22

With an income of $30,330 you could afford a median-priced, or $68,300, home in January, according to the National Association of Realtors. That was $430 less than it took in December and $4,912 less than in May 1982. The catch was that median family income in January was down, too—to $23,917, far below what was needed. In fact, median housing prices and median income have not been in balance since 1978. The trend, however, is hopeful, says the association's chief economist, Jack Carlson: "January represents the eighth straight month of improvement."

Europeans still like cars

While automobile sales in the U.S. dropped 7% last year, to 5.8 million units, the car market in the 15 countries of Western Europe went up 1.4%, to 9.9 million, according to *Automotive News*. That was not a record but still impressive. The sales leaders in Europe, in order of dominance, were Renault, Fiat, Peugeot, Ford, Volkswagen, General Motors, Japanese imports (as a group), BL, Daimler-Benz, BMW, Volvo and Alfa. The big gainers were GM and Renault. With Japanese imports under restraint, spoken and unspoken, in most major manufacturing countries, they made no gains in Europe last year. In the U.S. foreign cars held their own (the Japanese met their voluntary quota exactly) but imports improved their market share because of the decline in sales of U.S.-made models.

Let the sun shine

The annual battle to extend daylight saving time is under way, with the city dwellers on the East and West Coasts fighting for it and the farmers of the South and Midwest stoutly opposed. A bill to extend daylight time to eight months instead of the present six passed the House last year but died in the Senate. The same bill has been put in again by New York Democrat Richard Ottinger and California Republican Carlos Moorhead and this time has strong backing from senators like Alan Cranston of California, Paul Tsongas of Massachusetts and Claiborne Pell of Rhode Island. (The Reagan Administration also favors eight months of extra daylight.) The farmers still protest that the cows and chickens don't like the shift in time but that argument seems to be losing strength. The U.S. today has only 3 million farmers out of 99 million workers, compared with the 10 million out of 45 million in 1930. Ottinger and Moorhead claim their bill would save the equivalent of 100,000 barrels of oil a day, cut traffic fatalities, reduce crime and pump-prime the economy by extending daylight hours for shopping and recreation.

How much daylight do we need?
Do the chickens really care?

New oil for Japan?

A quiet tug-of-war is under way over allowing Alaskan oil to be shipped to Japan when the 10-year-old congressional ban ends in September. The rules now force North Slope oil to move to the West Coast or through the Panama Canal (after transfer to smaller vessels that can use that waterway) to the Gulf and East Coasts. A task force to examine the question was set up after Japan's Prime Minister Yasuhiro Nakasone visited President Reagan in January. A report from the Heritage Foundation argues that the current system cuts production in Alaska, causes a West Coast oil glut and saddles consumers with bigger bills because of the roundabout shipping. Selling to Japan, the report adds, would also lessen Japan's dependence on OPEC. Opponents include the American Maritime Association and the construction unions, who stand to gain if a new pipeline is built to move Alaskan oil from Puget Sound to the Midwest. Lifting the ban, the shippers argue, would wreck their coastal trade. (Under the 1920 Jones Act, all shipments between U.S. ports mu be in American ships.) "That wou be a formula for disaster," AMA president, Michael Klebanoff, to Congress. The White House is figh ing shy of the whole question, b reportedly is "interested" in sellir the oil to Japan.

Cash and the cities

Consumer inflation may be slowir down, but municipal government i flation is unabated, says Cornelius Tierney, a partner and specialist i municipal finance at Arthur Youn the accounting firm. The re son: Municipalities don practice good cash manag ment. A survey of 500 ci and town 1982 financi statements, Tierney say shows that 80% had no cas management program at al "Many governmental bu gets have assumed that sk high interest rates woul continue indefinitely," Tie ney told a gathering of cas managers. "The result is that they a now experiencing revenue shortfal and unexpectedly low investment i come, which is only aggravating the critical fiscal position." Cash ma agement, he says, is still the key t reducing debts and operating costs.

Uncle's long memory

Last year Boeing annoyed the Penta gon by lobbying Congress to have th military buy old 747 jumbo jets i stead of new C-5 transports fro Lockheed. The wiseacres wondered the military would retaliate. The A Force has just decided to take onl 1,499 of Boeing's air-launched cruis missiles instead of the 4,348 it orig nally wanted at a price of $8.5 billio For the rest, the Pentagon wants more advanced model, and Boein Lockheed and General Dynamics wi have to compete for the order. Do Uncle Sam remember?

Detroit's big ideas

The luxury car lives. Cadillac is look ing into the possibility of building $100,000 automobile to rival dream boats like the $165,000 Rolls-Royc and other big-ticket European model Pontiac, which dropped its big ca after the 1981 models, will offer it Canadian-built Parisienne for the U.S market. But Chrysler has written it last orders for the top-of-the-line Im perial, which will be phased out.

All of these Bonds having been sold, this announcement appears as a matter of record only.

In the opinion of Bond Counsel, interest on the 1983 Series A Bonds is exempt under existing statutes, regulations, rulings and court decisions from Federal income taxes and from income and franchise taxes imposed by the State of Utah.

New Issue / March 17, 1983

INTERMOUNTAIN POWER AGENCY

$900,000,000

Intermountain Power Agency

(a political subdivision of the State of Utah)

Power Supply Revenue Bonds, 1983 Series A

Dated: March 1, 1983 / Due: July 1, as shown below

Principal and semi-annual interest (payable each January 1 and July 1, commencing July 1, 1983) are payable at the principal corporate trust offices of Chemical Bank, New York, New York, Trustee, or Zions First National Bank, Salt Lake City, Utah and Security Pacific National Bank, Los Angeles, California, Paying Agents. The 1983 Series A Bonds will be issued as coupon bonds in $5,000 denominations in bearer form or as fully registered bonds in any integral multiple of $5,000, which will be interchangeable at the principal corporate trust office of the Trustee.

The 1983 Series A Bonds are subject to optional and mandatory redemption prior to maturity as described in the Official Statement.

The 1983 Series A Bonds are being issued to finance a portion of the costs of acquisition and construction of the Intermountain Power Project, as recently reduced in size.

The principal of, premium, if any, and interest on the 1983 Series A Bonds are payable solely from and secured solely by a pledge and assignment of the Revenues derived by the Agency from the Project and other funds pledged under the Resolution. Such Revenues include all payments attributable to the Project to be made to the Agency by the Purchasers pursuant to the Power Sales Contracts. Such payments, together with other available Revenues, are to equal the Agency's costs relating to the Project. Each municipal Purchaser has agreed to make its share of such payments solely from its electric system revenues and each other Purchaser has agreed to make its share of such payments as a general obligation. The payment obligations of the Purchasers under the Power Sales Contracts are not contingent upon the completion or operation of the Project.

The 1983 Series A Bonds are not an obligation of the State of Utah or any political subdivision thereof, other than the Agency, or any member of the Agency or Purchaser and neither the faith and credit nor the taxing power of the State of Utah or any political subdivision thereof or any city which is either a member of the Agency or a Purchaser or both is pledged for the payment of the 1983 Series A Bonds. The Agency has no taxing power.

AMOUNTS, MATURITIES, RATES AND PRICES

$109,800,000 Serial Bonds

Amount	Due	Rate	Price	Amount	Due	Rate	Price	Amount	Due	Rate	Price
$11,000,000	1990	8 %	@100%	$10,710,000	1994	9 %	@100%	$14,730,000	1997	9.60%	@100%
7,000,000	1991	8¼	@100	12,340,000	1995	9.20	@100	10,005,000	1998	9.70	@100
7,500,000	1992	8½	@100	13,495,000	1996	9.40	@100	8,000,000	1999	9.80	@100
9,820,000	1993	8¾	@100					5,200,000	2000	9.90	@100

$ 20,050,000	10 %	Term Bonds Due July 1, 2001 @	100%
$ 52,340,000	10⅛ %	Term Bonds Due July 1, 2003 @	100%
$110,000,000	10¼ %	Term Bonds Due July 1, 2011 @	98¾ %
$ 27,925,000	7½ %	Term Bonds Due July 1, 2018 @	76½ %
$ 579,885,000	10½ %	Term Bonds Due July 1, 2023 @	100%

(Accrued interest from March 1, 1983 to be added)

The 1983 Series A Bonds are offered when, as and if issued and received by the Underwriters, and subject to the approval of legality by Messrs. Mudge Rose Guthrie Alexander & Ferdon, New York, New York, Bond Counsel, and certain other conditions. Certain legal matters will be passed upon for the Underwriters by their counsel, Cleary, Gottlieb, Steen & Hamilton, New York, New York.

The offering of these Bonds is made only by the Official Statement, copies of which may be obtained in any State from such of the underwriters as may lawfully offer these securities in such State.

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Old Habits vs. Common Sense

LONG DISTANCE CALLS	MINS.	BELL	MCI	SAVING
St. Louis to Belleville	1	$ .32	$ .15	53.1%
New York City to Erie	1	.59	.36	39.0
Washington, D.C., to Atlanta	2	1.05	.75	28.6
San Francisco to Denver	3	1.52	1.15	24.3
Dallas to Milwaukee	5	2.34	1.87	20.1
Memphis to Fresno	9	4.16	3.46	16.8
Baltimore to Boston	4	1.85	1.45	21.6
Los Angeles to Chicago	7	3.28	2.69	18.0
Richmond to Baltimore	13	5.26	4.45	15.4
Cincinnati to Louisville	8	3.16	2.62	17.1
Cheyenne to Ft. Wayne	10	4.60	3.84	16.5
Houston to Phoenix	3	1.52	1.15	24.3
Atlanta to Cincinnati	6	2.69	2.18	19.0
Boston to Providence	1	.48	.27	43.8
Chicago to Cleveland	11	4.79	4.00	16.5
Knoxville to St. Louis	4	1.85	1.45	21.6
Jackson, MS, to Greensboro	12	5.35	4.49	16.1
Austin to Miami	8	3.72	3.07	17.5

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You place the same calls to the same places you're calling now. But you start paying a lot less.

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Follow-Through

Billion-dollar junk

Between 1974 and 1980, more than 50 nuclear power generating plants were canceled around the U.S. at a cost to the utilities involved of at least $5 billion (FORBES, *Aug. 4, 1980*). The cancelations were prompted largely by a drop in demand for electricity, which had grown at an annual rate of 8% during the pre-OPEC days but fell to 3.5% by 1980. The big problem was who would foot the bill. Ratepayers and shareholders, it seemed, would share the burden.

Since then, electricity demand has stopped growing completely. Last year it actually fell by 2.7%, the first decline in 38 years. The Edison Electric Institute says that in the last two years alone 44 more nuclear and conventional power units have been scrapped. To date, cancelations have cost at least $9 billion. Public utility commissions have continued to lighten the burden on some companies. In 26 of 33 cases decided since 1980, the EEI says, commissions have allowed rate increases and amortization of "sunk costs" (or both).

But there are other ways to salvage. At least, so thinks the Tennessee Valley Authority, the federal electric utility that canceled four nuclear power units last summer after sinking $1.85 billion into them. (The TVA put another four units, worth $2.35 billion, on hold.) "The cost has to be passed on to the ratepayers," says a company spokesman (TVA, after all, has no stockholders), but the big utility plans to reduce the burden by selling everything possible from the unfinished plants—some $2 billion worth of materials. This month Miller & Miller Auctioneers of Ft. Worth, Tex. will put $50 million worth of steel pipe, valves, air compressors, construction equipment, motors, pumps and the like on the block at TVA's Phipps Bend facilities. "This is the first sale of its kind," says Bill Flynn, vice president of Miller & Miller, but "it's the only way to handle" so much material. If, as hoped, $15 million is brought in, the TVA will hold five more auctions of capital goods over the next two years.

TVA surplus on sale
Salvage on the grand scale.

The TVA is also selling goods privately. Through negotiated sales, bids, sellbacks, small auctions and sales to the public, it has raised $24 million since the plants were scrapped last summer. Two days a week the public can come onto the sites and pick out what they want to buy at a $100 minimum. TVA also recovered $36 million by transferring equipment to current projects.

What price glamour?

Despite its glamorous lines of business, Miami's Wometco Enterprises, Inc. never was a magnet for investors for most of its existence. The Miami-based entertainment conglomerate (cable TV, broadcasting, movie theaters, amusement parks, Coca-Cola bottling, vending machines), with sales of $493 million, traded 13,000 shares daily in 1981, close to the same sleepy average it had maintained since founder Mitchell Wolfson took the company public two decades earlier. But in February last year the stock jumped five points in one week after Wolfson, then 81, had suffered two heart attacks. "The vultures are gathering," a leading broadcast analyst told FORBES (*Mar. 29, 1982*), "because they figure the company will be split up."

Now the vultures are circling again. Wolfson died in January, and the stock rose to a new high of 35 the following month; since then, it has been hovering around 33. The 22 price/earnings ratio puts Wometco in the pricey ranks with media issues like Metromedia, Cox and Capital Cities. The company claims at least part of the runup is caused by 17% operating earnings gains last year and the fact that 44% of divisional operating profits came from broadcasting. But Wall Street analysts say it has more to do with the fact that Wolfson's heirs still own 37% of the company but have no one in their ranks to run it. Never mind that the company and family deny any wish to sell out.

Whatever the reasons for the stock's appreciation, at least two analysts now recommend that investors

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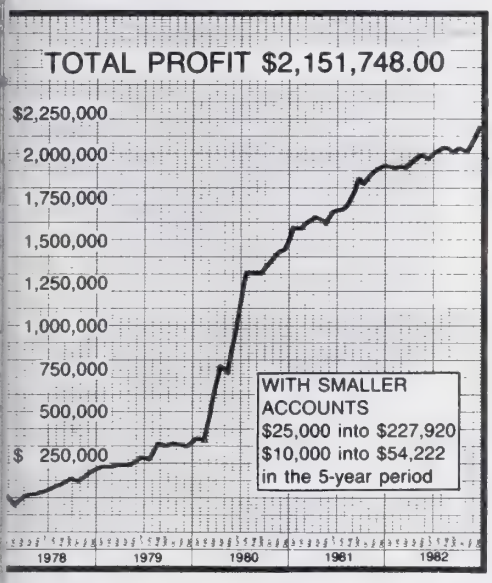
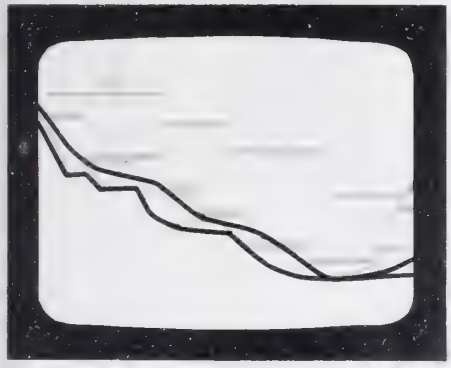
Stanley Kroll has become a legend in his own time . . . and for a good reason. He has made millions both for himself and his clients, trading commodities. Kroll's impressive trading record and financial achievements have been featured in numerous leading financial publications. In *The Money Masters*, by John Train (Harper & Row, 1980) Kroll is featured as one of the nine greatest portfolio investors of our time and the only one of those who "made it" in commodity investments.

Welles Wilder is the author of the revolutionary book *New Concepts in Technical Trading Systems* which is fast becoming a best seller. Stan Angrist writing in *Forbes Magazine* (Oct. '80) singled Mr. Wilder out as "The premier technical trader publishing his work today". Mr. Wilder has presented his systems at technical trading seminars in Asia, Australia, Canada, the U.S., and the capitals of Europe. Worldwide, there are probably more traders using Mr. Wilder's systems and methods than any other single discipline.

The commodity trading event of the 80's

THE KROLL-WILDER LONG TERM SYSTEM





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Stanley Kroll and Welles Wilder have combined their talents and trading methods into a **long term commodity investment system** that is different from all other trading systems. Stanley Kroll has made millions by applying his unique long term methods to the commodity markets. Kroll and Wilder have integrated these methods into a definitive long term commodity investment system that produces **remarkable capital appreciation with incredibly small equity drawdowns.**

The system is available as a software package for the APPLE II, APPLE II+, or APPLE IIe computer or as a **complete package including the computer.** The software generates Kroll's long term indicators visually in vivid five color graphics on the computer screen. The user can actually see the entry levels and Kroll's indicators coming together at each major turning point. This gives the user the option of using the system automatically or subjectively, as Kroll will demonstrate at the seminars.

In addition to giving **automatic** market entry and exit signals, the system also generates two optional entry signals for adding contracts to a position with known minimum risk at the beginning of a move. Kroll has proved over and over again that this is what **generates the really big profits in commodity investing.**

The system includes twelve different commodity portfolios to fit five different sized trading accounts which range from $10,000 to $200,000. Each portfolio has been thoroughly tested and analyzed using a 100% safety factor to fit the user's starting capital. The profits shown on the chart at the left are for several of the portfolios utilizing the **100% safety factor.**

The Kroll-Wilder commodity investment system is a breakthrough in both computer application and **profits** derived from technical trading methods. Although it is the most sophisticated and well-researched trading method ever offered, no computer experience or even commodity trading experience is necessary to utilize the system. Each seminar is a two day hands-on practical work session that covers everything one needs to know to begin utilizing this system in the market. **It is also available (for a limited time) as a mail order package for those who cannot attend a seminar.**

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MAY 20, 1983	St. Regis-Sheraton Hotel	NEW YORK, N.Y.
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These are the words of Dr. John E. McDonald, President of PDA Engineering, a diversified advanced technology company in southern California that grew 55% in 1981, with a 35% sustained growth projected.

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Follow-Through

consider taking profits. "Some investors say the company's assets are worth up to $50 a share," notes David Soshnik, an analyst with Scherck, Stein & Franc of St. Louis. "That's very speculative, and the earnings don't support that price." Even if Wometco's lucrative broadcasting stations were sold, Soshnik says it could take up to a year before the Federal Communications Commission approved the deal. If the company is not sold, he says, the stock is worth about $25 a share. Edward Tavlin of Prescott Ball's Miami office says a sale is pretty likely. "But you don't know when it's going to happen or whether it's really worth $50 a share." Buyers, he warns, want bargains, and a third party could buy control from the family and eventually tender for the rest at significantly less than the $50 per share that Wall Street seems to expect. "Everyone I know has a profit in this stock," says Tavlin, "so I'm not waiting for it."

Lovely losses

More than a year ago, Tony Lama Co., the El Paso bootmaker, was riding high on the Western craze started by high-fashion designer Ralph Lauren and stampeded by movies like *Urban Cowboy*. Lama's sales for the first half of 1981, at $46 million, were just shy of the total for all of 1979, and earnings were up 105%.

Then boot sales turned down at the heel. In 1982 Lama's earnings dropped by more than half for the second quarter as demand fell *(Follow-Through, Oct. 25, 1982)*. Lama, 45% family owned, started looking for a buyer, finding one in New York's Triton Group Ltd. (the old Chase Manhattan REIT), which wanted to use its $200 million tax-loss carryforward against Lama's earnings. It looked as if an $81 million acquisition would go through last January.

Alas, at its final meeting with Triton, Lama came up with some "totally unacceptable" changes in the deal, says Triton President Hal Upbin. Now it seems Triton will be acquired instead. Fuqua Industries of Atlanta has acquired 25.6% of Triton's voting stock. Chairman J.B. Fuqua, already Triton's chairman, too, describes the former REIT as "the best acquisition vehicle I have seen. It has substantial net worth, only two pieces of real estate, some cash, minimal debt." Plus that tax-loss carryforward.

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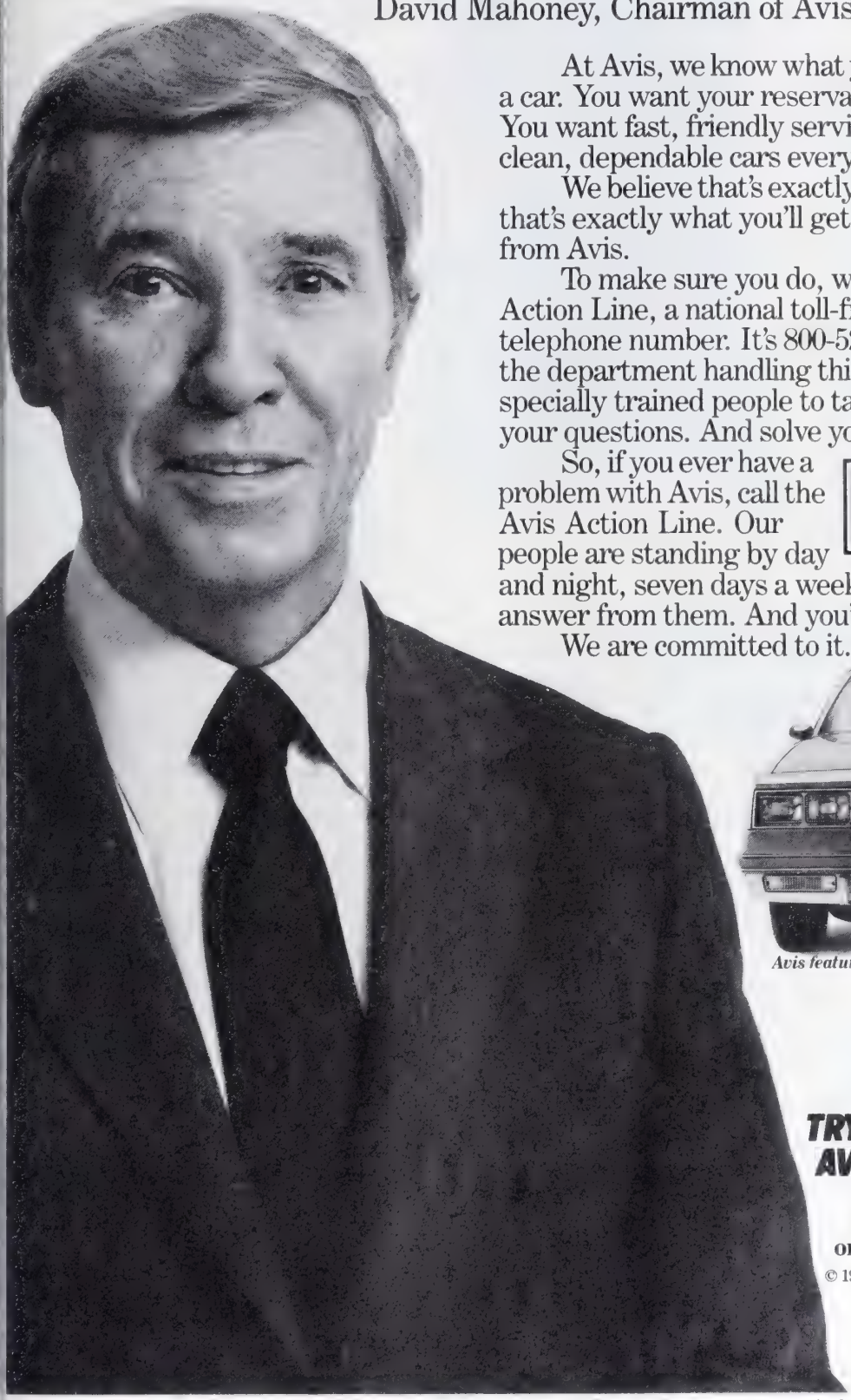

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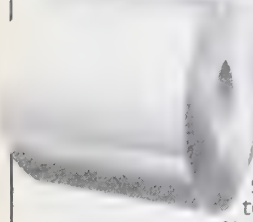

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Readers Say

Painful $

SIR: Your cover title of Feb. 28, "The dollar: too strong for our own good," was to the point as to our company and the industry we serve. The apparent imbalance as to currency value has made it difficult, well-nigh impossible, to compete effectively with Italian and Japanese competitors.

Without a [change in] the relative value of our currency, no amount of automation or high-tech application will overcome this handicap.

—R.T. Heglin
Vice President,
Refrigeration Sales
Tecumseh Products Co.
Tecumseh, Mich.

El Salvador

SIR: In "Has Congress Forgotten The Monroe Doctrine?" *(Fact and Comment II, Mar. 14)*, M.S. Forbes Jr. overlooked the fact that President John F. Kennedy killed the Monroe Doctrine during the Cuban missile crisis, when he allowed the Russian "advisers" to remain in Cuba after the missiles were withdrawn.

—Milton E. Ballard
Tucson, Ariz.

SIR: El Salvador is still their country, not, as MSF Jr. so condescendingly puts it, "our own backyard." If they choose to shoot their way into their government of their country, it is their business, not "ours."

—Christopher Murphy
Boothwyn, Penna.

SIR: The people in the U.S. should realize the truth: that it is their own security that is at stake. We shouldn't allow Russia to take over this part of the world so vital to our security.

—D. Cliffe Stone Jr.
Nashville, Tenn.

SIR: Your comments on negotiations hit the mark. Forcing the government to negotiate with the guerrillas would destroy the democratic process now in place.

—Jesse Helms
U.S. Senate
Washington, D.C.

Right word

SIR: In your article "How the rich get richer" *(Feb. 14)*, you said, "Somebody renamed GAC as Avatar, apparently thinking the word meant 'reborn.' In fact, it means the embodiment of a god in human form."

I am the "somebody" referred to. When I chose the name "Avatar," I was thinking of the third definition as noted on the attached.

—Kenneth W. Hollenbach
Assistant Treasurer,
Avatar Holdings Inc.
Coral Gables, Fla.

av•a•tar \áv-ə-ˌtär\ *n* [SKT *avatāra* descent, fr. *avatarati* he descends, fr. *ava-* away + *tarati* he crosses over] **1** : the incarnation of a Hindu deity (as Vishnu) **2 a** : an incarnation of another person **b** : an embodiment usu. in a person (as of a concept or philosophy) **3** : a variant phase or version of continuing basic entity

FASB unclear

SIR: The statement in the story "Mexican mirage" *(Numbers Game, Feb. 28)* that the FASB "hasn't addressed the issue" of U.S. companies using preferential exchange rates for Mexican subsidiaries to achieve certain financial results is incorrect. Contrary to your inferences, the mirages of an "instant debt repayment" and "income gets a boost" are not permitted.

—John March
Member, FASB
Stamford, Conn.

Accountants felt the issue was not at all clear, which is why, subsequent to the story, the FASB came out with a Proposed Technical Bulletin *concerning exactly that issue.*—ED.

Nervous anticipation

SIR: Many of us management consultants look forward to our copy of FORBES with all the anticipation of the Medici in Florence contemplating Savonarola's biweekly visit—always titillating but sometimes terminal.

—Spencer Hayden, CMC
The Spencer Hayden Co., Inc.
New York, N.Y.

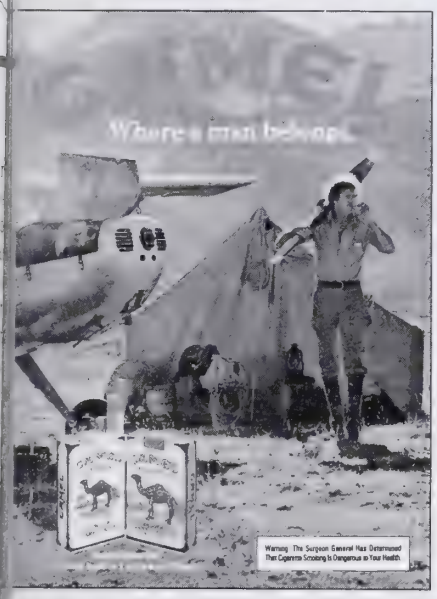
Camel man

SIR: Re: Your amusing "Camels Make Men Sleep With Propellers" *(Fact and Comment, Mar. 14)*. It seems only too appropriate to depict the Camel man out in the middle of a desert, where he

elongs. Since many cigarette smokers die prematurely, he can't be too right. He belongs with the camels, nimals that are not noted for their ntelligence.
—*Max Bader*
ake Oswego, Ore.

IR: Even flipping the propeller end-ver-end down the road would be better than carrying it.
—*H.J. Meyer*
Norwalk, Conn.

IR: The reason the Camel man takes is propeller off is to prevent someone rom stealing the plane. I hope he idn't lose the lock washers.
—*Jordan Cazeault*
North Weymouth, Mass.



Involuntary sale

SIR: I read your article about the contemplated liquidation of Franklin Realty *(Feb. 14)* with natural interest since some of my associates and I were participants.

The shares sold by the Shareholder Group to Franklin Realty were not sold on a voluntary basis, but were redeemed by Franklin. The Shareholder Group, at that time, viewed the redemption as a hurt to our values since we had every reason to believe that in the immediate future we would be receiving in the neighborhood of $28 per share.

It was our view that the company was leveraging the other shareholders' values for a larger gain by redeeming our stock [for $24.13].
—*Henry Salzhauer*
New York, N.Y.

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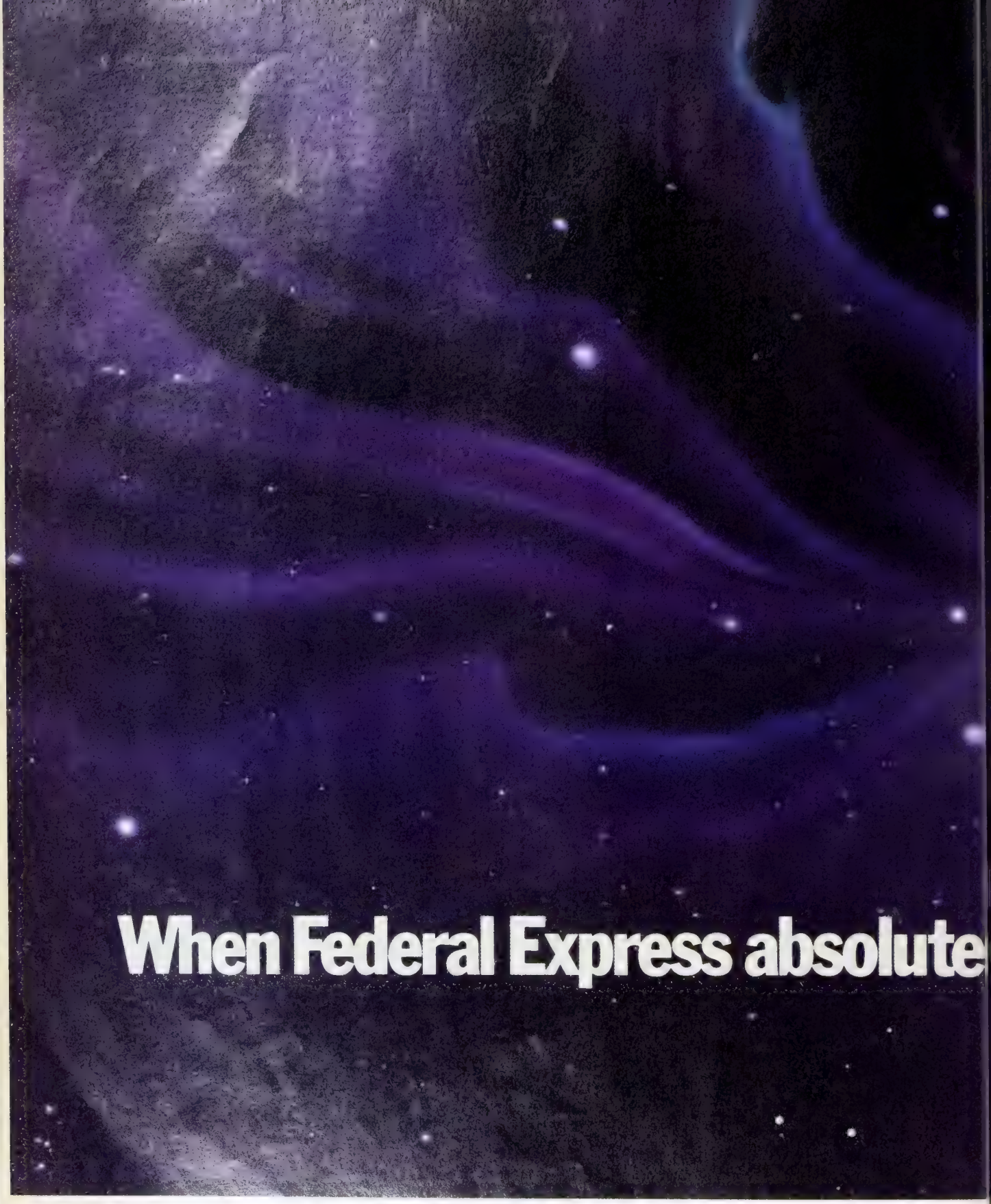

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Fact and Comment

By Malcolm S. Forbes, Editor-in-Chief

IF SOCIAL SECURITY'S HORRENDOUS HEMORRHAGING

isn't effectively staunched by what the Anemics in Congress have come up with, a bitterer pill will follow: a Social Security means test. If, at eligibility age, your resources and other sources of income exceed certain amounts, you don't git.

MORE U.S. FORCES IN LEBANON? DEEPLY DISTURBING

Sending the present 1,200 U.S. Marines as a significant demonstration of our commitment to a reestablished Lebanon was one thing—though it was far from unanimous that this was the soundest way to achieve a Mideast solution.

But to up the ante, as is now being discussed, would be a mistake of potentially dangerous degree.

The present U.S. presence is a sufficient indication of the depth of our concern and commitment. Stepping up U.S. military capabilities would change the nature of our purpose—without providing any militarily real Might.

U.S. Marines in Lebanon are, in reality, hostages to both sides. If and when it suits any contrary purposes of the conflicting forces, inflammatory "accidents" and incidents can happen in an instant, and in some instances are.

We cannot force a solution, and increased U.S. forces could easily achieve the opposite of our intentions.

This is not the way to move a possible solution forward.

ANYBODY WHO THINKS OIL AND COAL

will very long be out of style isn't thinking.

THE TYLENOL FALLOUT ISN'T ALL GOOD

It took more than guts and money for Johnson & Johnson to remarket Tylenol. It took good judgment, a commodity too frequently in short supply among top management when confronted with a marketing disaster—one, in this case, not remotely of their making.

Hundreds—nay, thousands—die daily around the globe in catastrophes varying from war to murder, automobile crashes, fires and floods, earthquakes and storms, suppression and revolution.

But which of these had the sustained, dramatic, panicking impact of the one-by-one seven Tylenol deaths from capsules cyanided by a maniac?

No law, no amount of money, no mountain of noble intentions will ever protect everyone from the occasional tolls taken by the demons of insanity.

Tylenol was then and is now a great medicine—especially invaluable to those for whom aspirin is a problem. Now its package is considerably more expensive and considerably harder to get into.

We'll be spending an estimated $200 million a year for "safe packaging" of drugs, which of course won't prevent any maniac from cyaniding flour or sugar or vegetables or anything else on the counter.

How many more costly, ineffective efforts at seeking 100% safety in products, services, defense, environment (working and living) can we afford before we go broke?

DEAR NETWORKS—PLEASE, PLEASE SPARE US

gavel to gavel coverage of the presidential nominating conventions next year. Come to think of it, the coverage was pre-gavel to post-gavel, an overwhelming percentage of it nasal drip. ABC's Leonard Goldenson has suggested to CBS and NBC that the three major networks leave to Public Broadcasting Service full exposure of all that boring drivel dreamed up by party propagandists to fill TV air time.

For his suggestion, Goldenson deserves anointing as the patron saint of boob-tube sanity.

Let the networks pick and choose what they cover, he proposes. That way they'll concentrate on who and what matters at those convention moments (rare) when what is being said or being done actually might matter (more rare).

If neither Party's TV coverage is going to be all over the national networks' air all the time, delegates'll get more expeditiously about their business. Such a change might be rough on coiffeurs and those who sell the orchids that deck the sashed bosoms of female Party heavies, but it will certainly lift a load from their countrymen's eyeballs.

Onward, downward with convention coverage!

11 YEARS AGO WE FEARLESSLY WARNED AWAY

would-be investors of advertising agency stocks:

"People who buy the stock of advertising agencies going public just have to be the same people who bet on Sure Things at horse races.

"I can understand the wisdom of those agency shareholders who *sell*. But what's with those who *buy*?"

Our self-righteousness shone brightly through our seeming self-interest. After all, advertising agencies place those advertising pages that are of some income consequence to all in the magazine business.

I was unhappily reminded of this Quixote-like stance against advertising agency stocks with this letter the other day from Tom Dillon, former chief at BBDO:

"This year 1983 will mark the 10th anniversary of BBDO going public, an event which coincided with MSF's editorial opinion that anyone who bought advertising agency stocks was out of his tree. Do you think a public ceremony would be appropriate?"

	—Stock— Price* (10/24/73)	Recent price	Increase since 10/24/73
BBDO Intl	9	39½	**338.9%**
John Blair & Co	5	52⅜	**947.5**
Doyle Dane Bernbach Intl	4⅜	20¾	**374.3**
Foote, Cone & Belding	10½	46	**338.1**
Interpublic Group	8½	53¾	**532.4**
JWT Group	9⅛	31⅞	**249.3**
Ogilvy & Mather Intl	12⅛	47½	**291.8**
Average increase			**438.9**
Standard & Poor's 500	110.27	151.19	**37.1**

*Adjusted: date as of BBDO's first trading

For me the appropriate ceremony is obviously an appearance in sackcloth and ashes. Here's a look at the record that makes my fearless "warning" turn out to have been such costly folly for anyone foolish enough to have taken my advice.

ANYONE WHO THINKS NEW YORK'S FABULOUS MAYOR KOCH

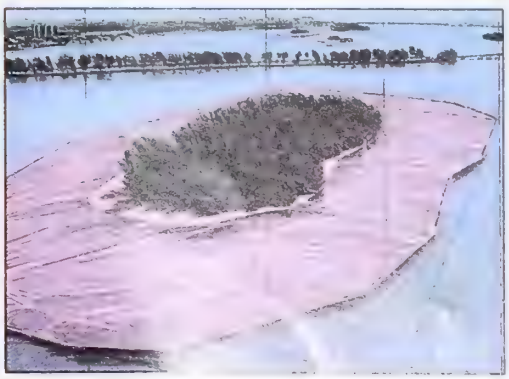
might be contemplating running for governor again or for President can forget that hope—or set his mind at ease, whichever the case may be.

His New York gubernatorial run was aborted in major measure by yet another famous *(Playboy)* interview in which he referred to the lifestyle of those New Yorkers not of the Big Apple variety: "When you have to drive 20 miles to buy a gingham dress or a Sears, Roebuck suit? This rural American thing—I'm telling you, it's a joke."

Most recently, Mayor Koch has pretty well taken care of all the other cities in the U.S. with this observation concerning the bidding to host the forthcoming Democratic Convention, which was last held (1980) in New York City. "Once they've seen Paris, how can you keep them down on the farm." So much for contending Chicago, Detroit, Washington and San Francisco.

Without those farms, though, it might be hard for the Big Apple's Ed to be elected President.

A FLORIDA ISLAND WRAPPED IN PINK PLASTIC



is artist Christo's latest project. Eleven islands, to be exact. You may recall his Running Fence of 24 miles, his Valley Curtain and like endeavors.

Characterizing these gargantuan attention-getters as art is debatable; drama perhaps, entertainment certainly.

The real art of Christo lies in actually carrying off these mind-boggling conceptual absurdities—raising the huge sums involved, running the gamut of required permissions and acquiring masses of volunteers.

'Tis the art of humbug raised to new heights. He's the Barnum of the bohemians.

ONE QUERY AND TWO SOUND COMMENTS FROM READERS

¶From a disillusioned recent college graduate: "I graduted from Princeton University in 1981 with a degree in Russian-Soviet history. That summer I spent two months in Leningrad. All through my years at Princeton I had considered the Soviet Union a fascinating country, and I looked forward to experiencing it firsthand. Funny thing, I discovered upon getting there that it is a perfectly miserable place, and I couldn't wait to get home. It wasn't until I had lived under a Communist system that I fully appreciated the value of American citizenship.

"While there, several of my fellow students and I made each other a promise that, upon returning to America, we would always cherish our heritage and do our best to keep our country great. I intend to keep that promise, and I hope to do it in the field of politics."

¶From the working owner of a restaurant FORBES consistently stars: "The past 20 years saw me through recessions twice. To tell you the truth, I am far from despising it, because it is a challenge and gives a good opportunity to check thoroughly our menus and cooking; to tighten the rein on those in the kitchen, from chefs down to dishwashers and all the dining room attendants; and to give the personnel incentives to work out the ways to improve on old methods and a host of other things we think we are too busy to bother with in seemingly good times."

¶And from a wondering young man, these questions: "I am Jay Ungerland, a seventh-grade student at Saxe Junior High School in New Canaan, Conn. and taking my first year of Latin. I was wondering if you had taken Latin. If you have, do you think that it helped you? Even if you haven't, do you think it would help to take Latin if someone wanted to be in the publishing field or business? Also, do you think Latin is a practical language to study?"

Yes, I took Latin at your age. Would you believe that 50 years ago it was *required* for admission to college? It took me 3½ years to get 2 years' credit in the language—and I had to trot my way through Mr. Caesar's campaigns. A dead language? Thank God, yes. A useful language? Sure, for those who know no other—of which there are none.

Pedants used to say it enabled you to learn other languages far more easily. Anybody who could learn Latin would find learning any other living tongue, unencumbered by Latin's intricacies, a breeze.

It's not for no reason that Latin's a dead language.

TO BE WASN'T OUR CHOICE

What we do with our being, is.

NOBODY CAN MAKE ANYBODY

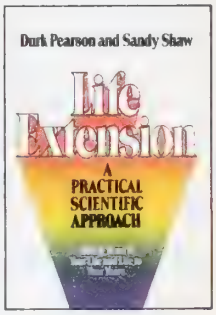
be someone he or she doesn't want to be.

BOOKS

● **Growing Up**—by Russell Baker (Congdon & Weed, Inc., $15). Growing up is as tough as growing old, albeit a different difficulty. This early-years autobiography by one of the really wonderful and gentle-but-piercingly-perceptive writers of our time is a total treat. He observes, "Children rarely want to know who their parents were before they were parents, and when age finally stirs their curiosity there is no parent left to tell them." His fortunate grandchildren and theirs, thanks to this lovely book, won't have that problem.

Excerpt: *Uncle Charlie gave me my first real education in politics. From him I first heard the word "socialism," a doctrine so evil [he said] that it could destroy our country. America had been built with initiative and hard work. Socialism, he told me, discouraged hard work and destroyed initiative. And socialism was what Franklin Roosevelt was practicing. . . . Afterwards I shouldered my magazines and trudged off to work, and Uncle Charlie poured himself another cup of coffee, rolled a new cigarette, and stretched out on the sofa to reread* The Federalist Papers. *For the longest time I thought of Republicans as people who rose from twelve-hour stretches in bed to denounce idlers and then lie down with a good book.*

● **Life Extension**—by Durk Pearson and Sandy Shaw (Warner Books, $19.95). No wonder and thank goodness this science-grounded, eye-opening, mind boggler is a best-seller. We've all got a longer future than we think as a result of the startling progress in, and increasing intermarriage of, biology and chemistry, psychology and medicine. This volume tells you how aging and all its formerly taken-for-granted concomitants of heart attack, cancer, et al can and are being slowed.



Excerpt: *When you eat, pay attention to your eating! You feel full and stop eating because your brain releases CCK hormones. What you think and what you perceive controls this release, NOT the number of calories consumed. Eliminate distractions while you're eating. Turn off the TV or radio. Put down the newspaper. Pay close attention to the aroma, taste, mouth feel, and appearance of your food. It's fun! Eat slowly and deliberately. You will be amazed at how little food it takes to fill and satisfy you if you pay very close attention to your eating. If you eat slowly, you give your hypothalamus time to release CCK and make you feel full. If you wolf your food down, you will consume far more calories than are necessary for complete satiation, due to the delay for CCK release.*

Other Comments

Often comments by others stimulate, irritate, abuse or amuse this editor's mind.–MSF

Emperor Without Clothes

What emerges from the attempts to piece together a version of Andropov's life is a portrait worthy of *Saturday Night Live*: the head of the K.G.B. as one wild and crazy guy. After a hard day at the office repressing dissent, Brezhnev's heir spends the evening at home, telling antiregime jokes in fluent English and playing jazz for dissidents. . . . Some commentators have made dark references to the Soviet disinformation apparatus. It is unnecessary, however, to plumb such murky depths for an explanation. The excesses that led to the invention of a media Andropov proceed directly from a common conceit of journalism that witnesses and "color" can be found for any great event. For the press, the humbler—and more honest—alternative is to admit that virtually nothing is known about this man called Andropov. He stands at the head of Russia, but we don't even know how tall.

—Edward Jay Epstein, *New Republic*

Job Generators

Entrepreneurs are fighting America's only serious war against poverty. It is small and high-technology businesses that generate most of the employment in America. . . . Between 1969 and 1976 smaller firms created 7.4 million new jobs, nearly 4 times as many as the government. A study for the Commerce Department showed that "young high-technology companies" have been growing in employment at a rate of 40% annually, about 13 times faster than "mature firms." In addition, small firms provide more than 80% of the jobs for young blacks and other "disadvantaged" citizens.

—*Wealth and Poverty*, by George Gilder

Japan and Arms

Japan has as much at stake in the security of free democracies as Europe has in the continuing strength of the United States. Yet Japan contributes almost nothing towards that security. Increased defense spending by Japan would increase America's ability to hold the Russians in the Far East and the Indian Ocean. It would make a bigger contribution still to Japan's own security, for it would help to offset the resentment roused by its trading success combined with its free ride on defense.

—*The Economist*

* * *

Japanese rearmament is welcomed in Washington; independence is not. But the two go hand in hand.

—Ronald Steel, *New York Times*

Poor Return

The *Morgan* had grossed $44,138.75 on her voyage. . . . Harpooner Haley's share was $400. In the course of his voyage, Haley, like his shipmates, had asked for cash advances and had made some purchases from the ship's slop chest. Haley's advances and purchases added up to $200, leaving him a total of $200 for four years of danger and drudgery. It was, Haley said, "a rather slow way to get rich."

—*The Whalers*, by A.B.C. Whipple & Editors of Time-Life Books

Never a Dull Moment

King Hussein has been dodging Palestinian and radical Arab attacks for much of his 30-year reign. During that time he has braved at least 11 assassination attempts, seven attempted coups and a full-scale civil war with the Palestinian guerrillas in 1970.

His enemies have tried unsuccessfully to kill him by putting acid in his nose drops, by attacking his airplane, by shelling his residence while he was watching a movie and by poisoning his food. (This last scheme was discovered only because the villain, a former royal aide, left 16 dead cats on the palace grounds by trying out the poison on them.)

—David Ignatius, *Wall Street Journal*

Nothing will ever be attempted if all possible objections must first be overcome.

—Samuel Johnson quoted in *Life Extension*

Presidential Ego

When plans were made to establish a Lyndon Johnson library, an order went out to the White House staff to save every bit of Johnsoniana—including memos, chits and scribbled notes—for posterity. Bill Moyers, however, continued to use his wastebasket freely and was finally reprimanded by Johnson's personal secretary. A day or so later he went around to her office and dropped a pile of chicken bones on her desk. "Here's something else for the library," he said solemnly. "These are the leftovers from the President's lunch today."

Johnson's ego was the inspiration for many jokes in Washington. [One tale had it that on a visit to the LBJ ranch, Germany's Ludwig Erhard told Johnson, "I understand you were born in a log cabin, Mr. President." "No, Mr. Chancellor, I was born in a manger."

—*Presidential Anecdotes*, by Paul F. Boller Jr.

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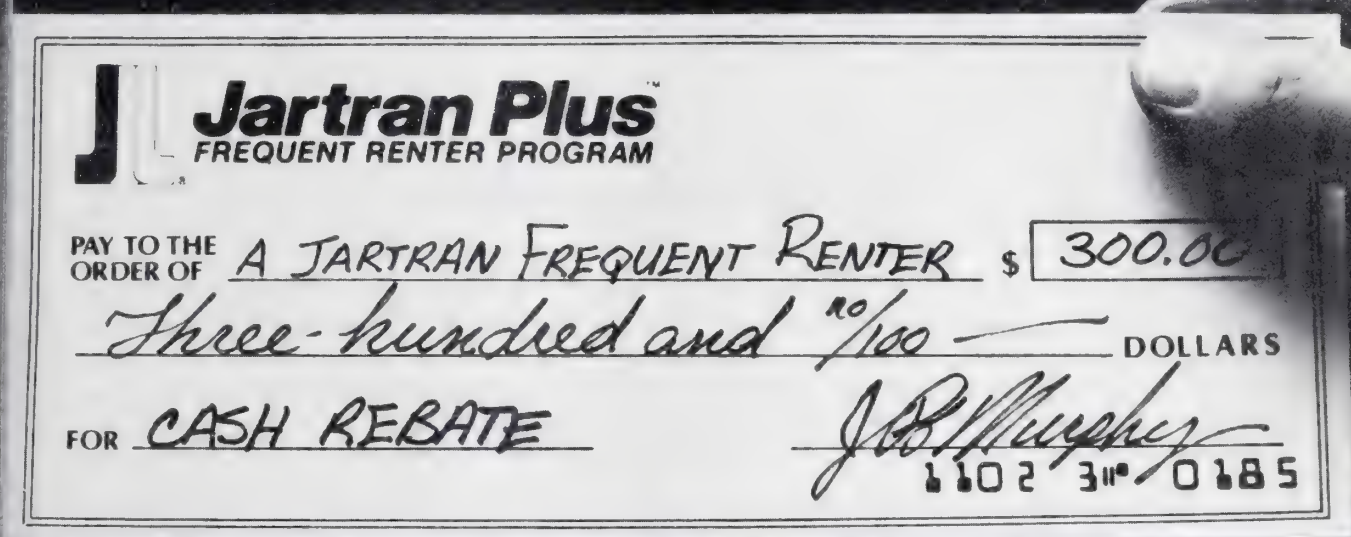

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Fact and Comment II

By M.S. Forbes Jr., Deputy Editor-in-Chief

DIAGNOSIS OF IMF'S Rx

In the process of bailing out cash-short borrowers, such as Brazil and Mexico, the International Monetary Fund is inadvertently working at cross purposes with its goal of getting these countries back on their economic feet.

The U.S. has a vital stake. A growing proportion of our GNP is involved with international trade; over 30% of our exports is bought by so-called lesser developed countries. Their health affects ours.

In the eyes of the Fund's technocrats, the be-all and end-all of a nation's health is its balance of payments. A deficit is bad, a surplus good. The IMF forces a borrower to adopt programs to curb imports and boost exports.

There are a number of flaws in this approach, flaws that can actually retard a country's ability to recuperate.

A major one is using the balance of payments as the ultimate test of how well a nation is putting its house back in order. In its first 120 years of existence, the U.S. had perennial trade deficits. But foreigners were eager to invest. This capital counterbalanced our trade shortfalls.

The IMF doesn't seem able to distinguish between the normal deficits of a developing country and those that are a result of inflationary policies. Every country goes through periodic but short-lived financial crises. Fortunately for the U.S., there was no IMF in the 19th century to put its economy through an unnecessary wringer. That would have retarded our industrial development.

Curbing imports can be counterproductive.

Some imports, like machine parts, may be necessary for boosting exports. Capital that would be more efficiently utilized elsewhere is diverted to "import substitution" industries. To achieve the desired belt-tightening, countries often raise taxes that hurt their productive entrepreneurs, thereby taking away the incentives that make growth possible.

Mexico, for instance, plans to raise substantially the income tax on so-called high-income earners, which includes most of the Mexican middle class.

The IMF emphasis on reducing imports and boosting exports is shortsighted. After all, one party's trade surplus is another's trade deficit. Now that a significant portion of the lesser developed countries is coming under this agency's tutelage, the IMF could be unwittingly encouraging the kinds of beggar-thy-neighbor policies that were so destructive during the 1930s.

Instead, it should be encouraging borrower nations to permit a little more free enterprise.

Look at those states most in trouble and you find economies that have an overly heavy dose of state intervention and planning. It's no coincidence that borrowers less heavy-handed with their economies—South Korea, Singapore, Hong Kong, Taiwan—haven't had the troubles experienced by the Mexicos and Argentinas of the world.

THE PERILS OF POLLS

Politicos today are addicted to polling. The pitfalls of taking these findings too literally were underlined in reading Richard B. Smith's first-rate biography, *Thomas E. Dewey and His Times* (Simon & Schuster). The reminder was not so much that Dewey led the samplings, but the reactions pollsters found to Harry Truman's now-legendary "give-'em-hell" campaign.

Truman speeches were shrill, demagogic. By an overwhelming margin, pollsters found voters disapproved. Relieved, the GOP felt that no response was necessary.

But one group of voters listened to Truman's message, even if they didn't like his style—the farmer. Grain prices that summer suddenly collapsed. Truman told them, in effect, "If you get in trouble, we Democrats will help you out. Those Hoover Republicans will let you go broke."

The pitch worked. Farmers voted Democratic.

If Dewey had done as well with farmers in that 1948 election as he did in his unsuccessful race against FDR four years before, he would have beaten Truman handily.

Truman was lucky he had no pollsters. They would have pressured him to be more "cool," less "hot."

Instead, the President offended the voters with his style, but he made his point with a critical group of them and so pulled off the greatest political upset in American history.

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Edited by Thomas O'Donnell

EVERYTHING IS SET FOR A STRONG PICKUP

For the first time in many years pay increases are being truly earned

WHAT'S AHEAD PREDICTS THAT THE PRODUCTIVITY of American business will rise by 3% to 5% in 1983. No magic here. Because they have cut staffs and cut frills, businesses will be able to handle increased orders with very little additional overhead—and that is what productivity is all about, spreading costs over a bigger volume. The trend in unit costs will be favorable, too. In the inflationary late 1970s, wages, on average, rose by 10% annually while employees worked no harder, but now the arrow points in the opposite direction: Productivity is catching up with pay. In 1982's fourth quarter, wages rose by just 5.5%. At the same time, productivity on an annualized basis increased by 2.4%. So the net increase in unit labor costs was just over 3%—a substantial slowing down. Says Harvard economist Hugo Uyterhoeven, "Unit labor costs lead to an underlying inflation rate of roughly the same size."

With relative wage restraint continuing, the 1983 increase in wage agreements is now running at a 3.2% rate. Thus, inflation in 1983 will come in no higher and probably lower than that figure. Three percent inflation! An immense accomplishment. Scarcely three years ago we seemed heading for 20%, perhaps even toward hyperinflation. Another reason inflation will not be a problem this year is that industry is currently running at only 69% of capacity. That means there will be few if any inflationary bottlenecks as the pickup gathers force.

This time business didn't cut just variable costs; overhead, too, felt the knife

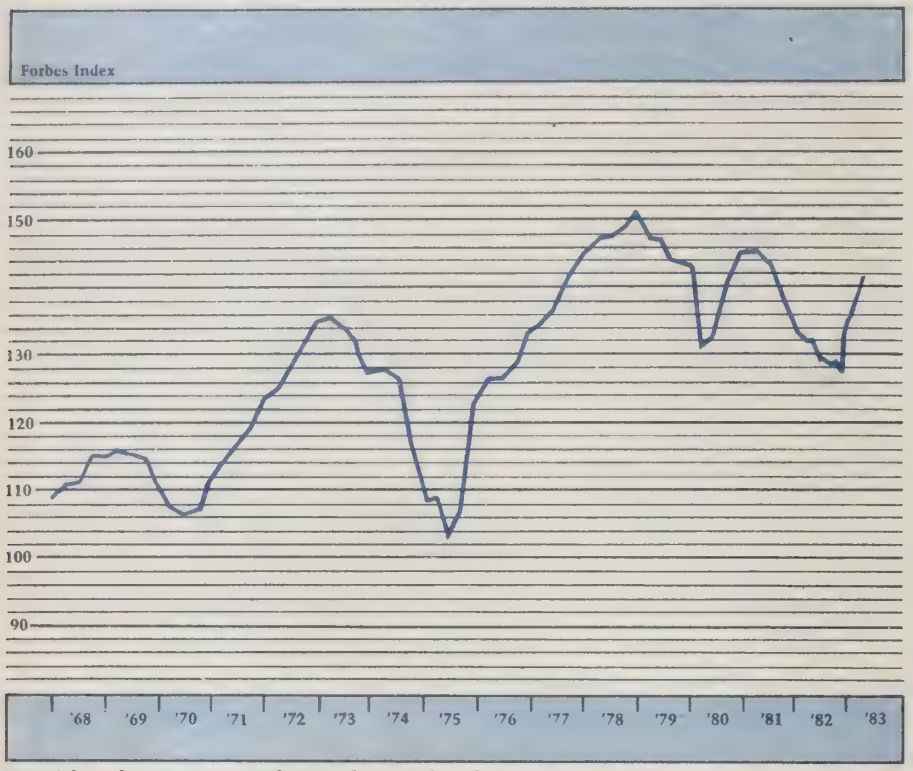
IT'S A CRUEL THING TO SAY, BUT recessions do serve a useful ecological purpose in the economy. This one, being exceptionally severe in manufacturing industries, led to moves that, while unpleasant in themselves, help promote the efficiency of the society. In other recent downturns, variable-cost employees (hourly workers) were laid off, but fixed-income employees (white collar workers) were kept on the payroll. During this recession, for the first time, hundreds of hard-strapped companies cut deeply into their fixed costs. These costs will stay down for a good while. "Corporations will add back their variable costs [hourly workers]," says Uyterhoeven, "but they won't add back white collar workers if they see they can do without."

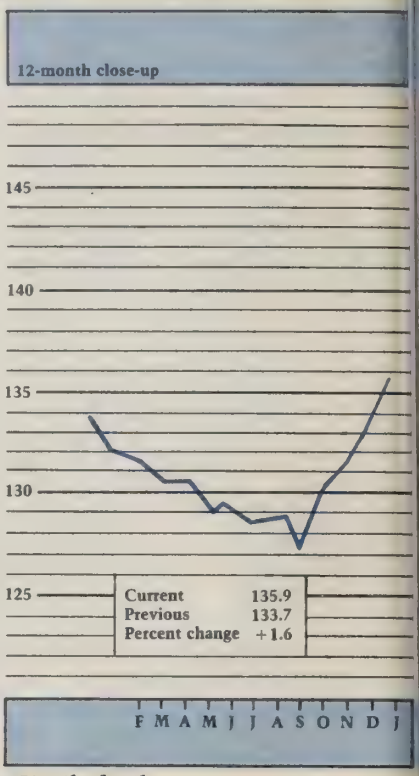
Add to this enhanced efficiency such other factors as falling energy prices, the Administration's highly successful business tax cut and lower raw material and commodity prices, and you get the potential for a terrific carrythrough to the corporate bottom line. Corporate profits for the year could be up as much as 30%. Not only will this quickly produce an improvement in business liquidity, but it will also make boards of directors more willing to say yes to capital spending proposals, especially productivity-enhancing capital spending.

If 6% draws money from the moon, what would a genuine 7% do?

FINALLY, INTEREST RATES ARE ALMOST CERTAIN to come down much further. Assuming inflation in the 3%-to-4% range, U.S. Treasury bonds are currently showing a *real* return of about 7%. It used to be said that 6% would draw money from the moon. What will 7% do—once people accept that inflation is truly going to stay down?

The Forbes Index





Catching its breath. The Forbes Index has posted another gain, for the sixth time in a row. Although the 1.6% rise almost certainly means that a recovery is in the offing or has already begun, the momentum is slowing. This indicates that the easy progress has already been made.

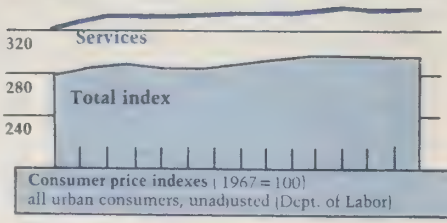
Industrial production, for example, increased by 0.3% during the latest reporting period, compared with a 1.3% gain a month earlier. Similarly, housing starts were up 3.3% following an 11.3% jump in January. This is good news, even though cold weather construction statistics can be misleading.

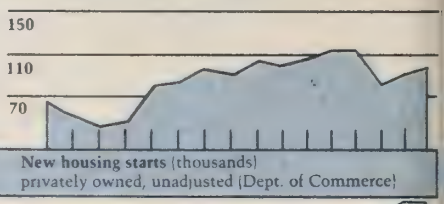
Consumers are not spending as they did earlier. That's because personal income fell 0.1% after rising 1.0% during the first month of the year. As a result, retail store sales dropped 0.4% from the January level.

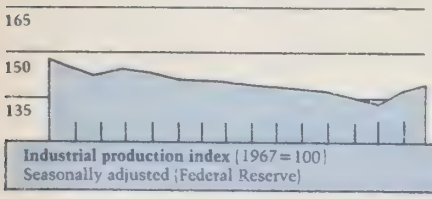
The Forbes Index Components

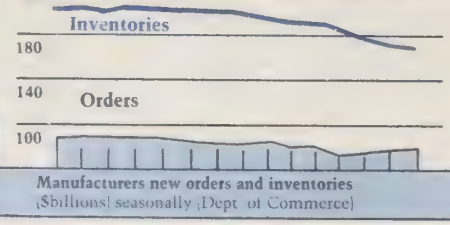
The FORBES Index is a measure of U.S. economic activity composed of eight equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, the level of new orders for durable goods compared with manufacturers' inventories, total retail sales, new housing starts, personal income, the change in the amount of consumer installment debt outstanding.

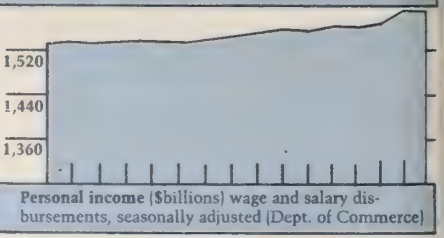
To measure these eight elements, FORBES monitors 11 series of U.S. government data. The last 14 months' data for each series are presented at right.

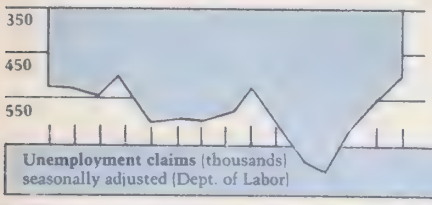


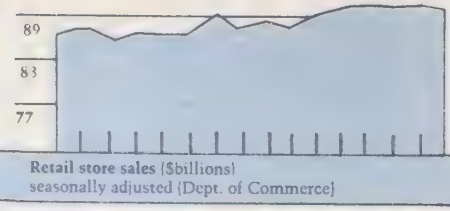


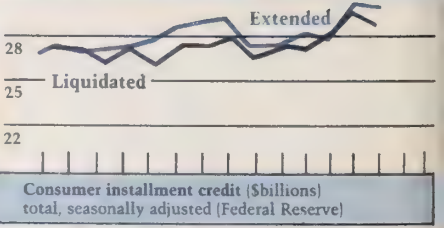












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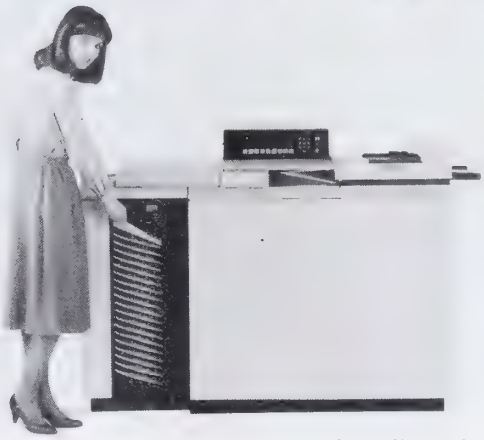

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The employee ownership plan at Weirton Steel is being greeted with too much easy sentiment, too few hard questions.

Who guards the public interest?

By Howard Banks

THE REACTIONS to the employee buyout of Weirton Steel have been understandable if predictable. There has been the rah-rah flag-waving and the bumper stickers proclaiming "We can do it" in the name of parent National Steel's 7,000 employees at Weirton. There are the amused comments about Marxism coming to West Virginia. But the big and serious questions have been glossed over or ignored, questions about the nation's taxpayers supporting not so much a steel mill as a town that lives high off the hog, and whether such support for this one mill is fair when there are many other struggling steel mills.

It is well understood why the Weirton employees will probably vote to buy out the mill—the U.S.' eighth-largest steelworks—in an Employee Stock Ownership Plan (ESOP). They have no choice. National has informed them that it would not put substantial new capital into the facility. "Weirton is a one-industry town," explains Walter Bish, the 36-year-old president of the Independent Steel Union—not part of the national United Steelworkers Union. "We have no choice but to give it a go."

His management opposite number on the joint negotiating committee at Weirton, Carl Valdiserri, executive vice president of Weirton, puts it this way: "National Steel chose the cards and gave us the hand to play. So we are playing it for all we are worth."

But is the effort realistic as a business venture? Weirton is badly placed when it comes to its main products, tinplate for cans and sheet for the car industry. Over half its output (a total of 1.6 million tons last year) is in tinplate—of acknowledged high quality and liked by its customers. But the tinplate market has declined dramatically over the past ten years and is expected to go down another 2% to 3% a year over the coming five years. Aluminum cans already have 90% of the beer market and 75% of soft drinks, while aluminum foil-lined cartons are taking over other packaging markets. The Weirton people hope to halt this slide in market share. But Weirton is too small to do this by price-cutting. It will have to depend on the kindness of customers, who, says Valdisseri, "want us in operation to keep the others honest."

One of Weirton's secrets is that it is based on a highly automated, but by today's standards narrow, 48-inch mill. This narrow width ensures rigidity and therefore prized flatness for the declining tinplate market, but leaves the mill at a major disadvantage when supplying its other main customer, the car market. Car bodies are made from wider sheet these days. Neither of Weirton's main products,

Main Street, Weirton, the mill's ventilators in background
If an ESOP saves this town, will other towns suffer?

cans and cars, is high-growth. Before the new Weirton can get a high-growth product, it will have to invest heavily—in a new form of galvanized sheet for cars, say, or a new desulfurization process to improve the quality of its steel.

The Weirton co-op will have to raise $400 million to $500 million for urgently needed capital spending over the coming five years. That was the bill that turned off National. The plant has been marginally profitable, the parent says in its 1982 annual report, but not enough to cover its investment needs. Immediate requirements are $50 million to $75 million to meet EPA rules, $35 million to clean up water effluents. Then there will have to be a relining job ($17 million) on one of the four blast furnaces and a major rebuild of another. The mill also needs a second continuous casting machine and new coking ovens. Thus there remains a real question whether the new employee-owned plant will be anything more than marginally profitable and kept alive by taxpayer subsidy plus indirect support from National Steel.

Faced with closure costs approaching $800 million (through pension liabilities and severance payments), Pittsburgh-based National Steel has agreed to accept lots of paper. Under the ESOP, Weirton will pay $66 million for the mill and equipment, about 22% of depreciated book value. Payments of principal will run from the sixth to the fifteenth years, and no interest will be paid until the new company has a net worth of $100 million, which it anticipates will occur in 1985. National Steel will get roughly $200 million for current assets, such as inventories, $75 million down and the remainder spread forward up to 28 years.

National also will maintain existing pension liabilities, which will be vested whether the worker has completed ten years or not. In addition, National will be liable for all future pensions over the five years after a takeover, including a special $400-a-month supplement written into the present, highly generous labor agreement with the independent union should there be any large-scale closures at the mill.

Creating an ESOP is the key to making the new Weirton work. These plans, set up by Congress in 1978, allow the worker-owned company to issue stock in a trust, which can then be used as collateral for loans. Most of the principal payments into the trust, as well as interest payments on the borrowings, are tax-deductible.

The new worker-owners' contribution will take the form of a 32% cut in their current pay. This pay reduction, under ESOP rules, is said to "generate" roughly $128 million a year as equity capital in the trust. The pay cut is designed to help fill a $1.7 billion cash-flow gap over the coming ten years, and it should cut the mill's total operating costs by just over 11%.

There is plenty of room for pay cuts. Over the years, because there was an independent union and no strikes (the last was in 1933), management and workers paid themselves highly. Labor costs at Weirton, including benefits, now total $27.60 an hour, 12% above the pre-giveback steel industry average of $24.70 an hour. An annual take of $30,000 is common at Weirton, especially with a deal that doubles up on the overtime premium. And some workers, such as those controlling the rolling mills or scarfing the slabs (cleaning them of defects before rolling), can get as much as $65,000 to $67,000 a year, according to Valdiserri.

Over the years, management and workers paid themselves highly. Labor costs at Weirton, including benefits, now total $27.60 an hour, 12% above the pre-giveback steel industry average of $24.70 an hour.

Which accounts for the apparent absence of the kind of economic blight one might expect to see in an area with 16%-plus local unemployment. The cars are mostly new, the supermarket shelves as well-stocked as those in, say, the suburbs of Washington, D.C. (a most recession-proof area) and the bars and restaurants are well patronized. "Only 3 of our 600 mortgages are delinquent," says Henry Schmalstieg, president of the First National Bank of Weirton. And the proprietor of one of the local eating spots, the Anchor Room, says business is down only about 10%.

Which perhaps helps explain the extraordinary local effort to sustain the largest employer in West Virginia. (The area in 1980 had the fourth-highest average pay in the country, after Anchorage, Alaska and Flint and Detroit, Mich.) Everybody who has anything to do with the steelworkers, even indirectly, is well paid. The grounds around Weirton Steel's office building (discreetly high on a hill away from the grime of the mill) are manicured and the shrubs expertly pruned by workers getting the sam average $27.60 hourly compensatio as the millworkers. Just as do the me cleaning the windows, even thoug that job is contracted out. "Yes," a knowledges Valdiserri, "we hav some [educational] work to do."

One of the first areas needing "edu cation" will be business decisions, e pecially those that might cut job The signs already are not good. "Doe any employee-owned company vot for pure business decisions [meanin those that cut jobs]?" asks Walte Bish. "We will let you know how w got on in a couple of years."

The management side of the pro posed new company tried to demon strate that things like the pay cu were serious and needed by cuttin 427 white-collar jobs (managers an clerks). "There is overmanning al through," concedes Valdiserri, but i is worst among the support staff. Nev ertheless, his business plan, now be ing toted around to the banks by th joint committee's financial advise Lazard Frères, already contains on distortion aimed at pleasing the unio side. Valdiserri hopes that attritio will take care of many of the 3,00 now laid off at Weirton, and the cap ital program (such as relining a blas furnace) will take back around 600 But the plan places the new cokin ovens much higher than strictly nec essary in the list of needed invest ments—because it will create jobs.

Looked at coldly rather tha through mists of sentiment—sympa thy for working men or enthusiasn for the principle of worker owner ship—there is a serious questio whether Weirton's ESOP should b encouraged. Aside from the tax subsi dies of the ESOP, there is the questio of fairness to other steel companie still operating under market rules.

No rival steelman will address th subject public though some wil privately. Whi many of them ar making painfu decisions, such a Bethlehem Steel's to close two of it tinplate lines and push the work int its two remaining ones, Weirton i being helped to re-form as a mor competitive rival.

"I've thought about that a lot," say Valdiserri. If the shoe were on th other foot, he says, he would screan and holler, but he knows that in to day's climate (where even Presiden Reagan has talked about encouragin a wider ownership of capital) it woul do no good. Then he goes on to ques tion whether any company in stee can afford to pay both workers an shareholders: "In such a capital-inter sive business, facing hostile worl

competition, I am not sure how the U.S. market can be satisfied by a company paying workers U.S. wages and benefits and also satisfying the stockholders." The ESOP is an attempt to combine the financial interest of worker and shareholder.

Where tradition runs as strongly as it does at Weirton (boys went to their high school graduation with their lunch pails packed, ready to start work at the mill, the locals claim), fighting to keep the town's main employer going makes local sense. But questions have to be raised when state aid will simply transfer unemployment somewhere else in the time it takes for the new Weirton to die. There are trade laws to stop that sort of thing when it is another country doing the aiding and abetting. ■

You already know about Baldwin-United's heavy debt burden. Now consider the other strains on Morley Thompson's cash.

Name that tune

Morley Thompson of Baldwin-United
A case of reverse leverage?

By Richard L. Stern

A YEAR AGO, when it was riding high, Baldwin-United Corp., the old piano maker turned dazzling financial services conglomerate, reported audited financial results for the previous year on Mar. 10. As this article is written (Mar. 22, 1983), Baldwin-United has yet to release even unaudited figures for 1982. Inevitably, with Baldwin-United no longer riding quite so high—indeed, having come under anxious scrutiny by not only financial analysts but by various state insurance regulators as well—Baldwin Chairman Morley Thompson's delay in reporting financial results for 1982 is causing considerable speculation.

Observers expect Thompson to report on 1982 no earlier than Apr. 1. And when he does, so Byzantine are the affairs of the company, even the most skeptical among them would not be surprised to hear Thompson announcing an *improvement* in the company's reported earnings. It is a sign of the company's complexity, and a comment, too, on the ingenuity with which generally accepted accounting principles can be applied, that Baldwin-United's reported earnings, even if they exceed 1981's reported $85.5 million to set a company record, will not wholly reassure Wall Street that the company can cope with its immense financial burdens.

Thompson's credibility problems, analyzed in detail recently in these pages *(Dec. 20, 1982)*, are many. Under scrutiny by analysts, by state insurance regulators or by the Securities & Exchange Commission are, among other things, the manner in which Thompson books the underwriting profits of various subsidiaries, the manner in which he amortizes selling costs and the number and magnitude of certain intracompany transactions.

The net of these uncertainties is that Baldwin-United appears to be—whatever its *reported* earnings—in a serious cash bind. So, near the top of Thompson's pile of woes is the problem of paying the interest on Baldwin-United's total debt of $1.6 billion. Some $541 million of that took the form of bridge loans to help Morley Thompson take over MGIC, the

mortgage reinsurance outfit whose acquisition helped spark great excitement in Wall Street and, of course, in the press. The banks holding the largest pieces of that bridge loan, FORBES has learned, are:

Bankers Trust	$97.3 million
Continental Ill	97.3 million
Manufacturers Hanr	97.3 million
Chemical Bank	73.8 million
Crocker	48.6 million
Mellon	48.6 million
Midland	48.6 million
Bank of New York	29.2 million

FORBES has estimated that Baldwin-United needs something over $150 million a year just to meet its debt service. Last year Thompson repeatedly promised to pay off his bridge loans but was unable to do so. These banks, presumably, are among those most anxious to get a look at the next annual report.

Beyond the debt burden as such is the apparent, and apparently serious, slowdown in sales of single premium deferred annuities, the "SPDAs," until recently a very hot product indeed for Baldwin's insurance subsidiaries. It was chiefly due to the insurance subsidiaries, and especially sales of SPDAs, that Baldwin showed a consolidated profit of $106 million through the first nine months of 1982 (while the rest of the company seemed to have lost nearly $16 million). Through 1982, sales of SPDAs averaged some $31 million per week, a total of $1.6 billion for the year, with the company cheerfully issuing weekly reports as it rolled along. There came a weekly report earlier this year, however, that showed redemptions of old SPDA plans exceeding sales of new plans, $3.8 million to $3.6 million, and the weekly reports suddenly stopped coming. Some of the biggest sellers of SPDAs, including Prudential Bache and Smith Barney, Harris Upham, let it be known they were "de-emphasizing" the sale of the once-hot SPDAs, or had stopped selling them altogether.

The impact of the slowdown in SPDA sales is reverse leverage with a vengeance. Morley Thompson had been booking in the first year a percentage of income Baldwin was to realize through the entire ten years of an SPDA. But at the same time he was spreading out over ten years the cost of selling the plan—chiefly the 4% or 5% in broker commissions. So, as sales decline, the front-end booking of profits stops, but the acquisition costs go on for years. The result could turn paper profits into sizable real dollar losses almost overnight.

In Arkansas alone, Thompson has problems enough to employ several platoons of lawyers. Late last year regulators there had already downgraded the value of the portfolio of his Balunit subsidiary, through which he owns MGIC, thereby forcing Thompson to come up with more than $120 million in assets to stave off technical insolvency. Now Thompson has forced them to look again, skeptically, at Balunit's assets. On Jan. 31, Baldwin notified state authorities that, subject to the approval of the Securities Valuation Office, an agency supported by the states that appraises securities for state regulators, it is increasing the value of Balunit stock from $129,256 to $169,000 per share. In theory, that should mean that Balunit is worth more than the last time it was evaluated. In fact, the earning power of Balunit's only significant asset, the MGIC subsidiary, has been under pressure because of the housing market's recent troubles.

If all that were not enough, there is yet one other matter pending in Arkansas that will require still more cash to resolve. It will also prove a considerable personal embarrassment to Morley Thompson, who enjoys the reputation of being a certified "tax genius." A key element in Thompson's ambitions for Baldwin-United was his adroit use of subsidiaries as cash cows—he would take the cash they took in, especially the ones selling SPDAs, and in return give them securities of one kind or another from other subsidiaries. It now turns out that, as a result of considerable intracompany deals of that kind involving its NILIC (National Investors Life) subsidiary, Baldwin-United recently acknowledged to Arkansas authorities that it was headed for a tax liability it hadn't counted on. As a result, NILIC's counsel informed authorities, "NILIC would incur a substantial reduction in its surplus." One tax authority familiar with the problem speculated that it might ultimately cost the company over $30 million.

One way and another, Morley Thompson has his work cut out for him. ■

The government may not want to acknowledge it, but it looks as if leaded gasoline is back in fashion.

EPA's next hot potato

By Carol E. Curtis

A MAN IN A late-model car, one sporting the words "unleaded gasoline only," pulls up to a self-service gas station and creates a big problem for the EPA. He fits a plastic adapter on the nozzle of the regular gas pump at the station, and fills up his tank with leaded gasoline at a savings of up to 50¢ per gallon.

What the driver is doing is not illegal. But it is hardly what the Environmental Protection Agency had in mind ten years ago, when it sought to phase out the lead in gasoline by requiring that all cars made after 1974 burn unleaded fuel only. It is not clear what, if anything, the EPA will—or can—do about it.

Noble the EPA's rule may have been, but it has a serious flaw. It puts the burden of enforcement on the service station dealer. In 1973 virtually all gasoline was pumped by a service station attendant. Now, over 70% is sold self-service nationwide.

With the widening spread between the prices of different grades, motorists are looking at the premium price for unleaded, and deciding that it isn't worth it.

If regular gasoline is put into the tank of a car that is supposed to take unleaded, it not only does not hurt the engine, the car actually runs better

because regular gasoline is two points higher in octane. But it damages the car's catalytic converter, the device that makes the engine clean-burning. That apparently doesn't bother cost-conscious motorists, even in places where converters are inspected regularly. When such things as discounts for cash and self-service are taken into account, a buyer can pay as little as 95 cents a gallon or as much as $1.45 a gallon. Nationwide, the average difference between leaded and unleaded is about 18 cents, and that's more than enough. "The price is what counts," says Victor Rasheed of the Service Station Dealers of America, a Washington-based lobby. "With such unbelievable spreads, civil disobedience is becoming the rule."

Rasheed estimates that about 20% of all motorists are putting leaded gas into autos designed to burn unleaded. To get around the different nozzle size, he says, a driver simply buys a 40-cent plastic adapter for the fill pipe, and knocks out the unleaded restricting plate with a screwdriver.

Regular (left) *and unleaded premium prices in College Park, Md.*
With such a price spread, who cares about pollution?

Why does unleaded cost so much more anyway? For one thing, it requires more refining steps and so is more expensive to produce. For another, many dealers are under heavy oil-company pressure to increase volume (or possibly lose delivery rights) and so are selling leaded gasoline cheap, in some cases 5 cents or more a gallon below cost.

At the same time, different prices for cash and self-service have created such a bewildering array that cost-conscious motorists just focus on the cheapest way to fill up their tanks.

Rasheed raises a thorny question for the EPA. Billions have been spent, he points out, to develop and market unleaded fuel and to design cars that can burn it. There has been a big sacrifice in fuel efficiency, for, without emission equipment, cars get much better gasoline mileage. But do you put a cop at every gas pump? "This is almost like saying the whole damn thing was a futile investment," Rasheed says.

Over to you, Bill Ruckelshaus. ■

Everyone wants into small computers. Where does that leave Tandy, the pioneer retailer? Under attack but still going strong.

Can Tandy stay on top?

By Paul Bornstein

For Tandy, the retailer of consumer electronics, the path of growth has been spectacularly steep but far from smooth. There have been poor years, too. Like the CB radio bust in 1977-78. Is Tandy in for another jolt?

A close follower of cash flow trends is analyst Paul Pappadio of Capital Flow Trends, a service of Purcell, Graham & Co. He defines "operational cash flow" as net income plus depreciation and changes in working capital, less dividends and investment in property, plant and equipment, and debt. Essentially it's the cash, if any, the company has left at year's end. This highly significant measure of liquidity often gets overlooked in the general fascination with reported earnings per share.

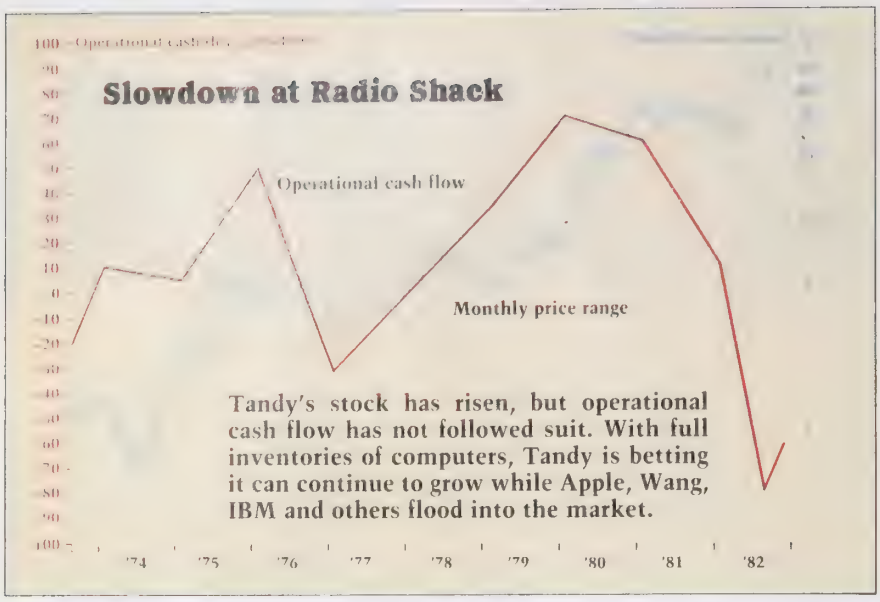
The last time Tandy dipped was in the CB debacle following the years 1975 through 1977. As consumers stampeded to get the chance to say "breaker one nine," Tandy saw its net income rise from $26.8 million in 1975 to $69 million in 1977, a 157% increase. Its stock price, adjusted for numerous subsequent splits, rose from about ¾ to about 6. Operational cash flow was positive and rising throughout *(see chart, p.44)*. It moved up quickly from 1975 to 1976, hitting almost $50 million.

However, Tandy's OCF suddenly fell almost as fast as it had risen, down to a negative $30 million in 1977. For a while, the stock was still riding high, but ended by losing a full half of its market value. The trend of operational cash flow had foretold the drop.

Now Tandy is on a much more solid base and on a much grander scale. In August 1977 Tandy was one of the first in the field in microcomputers. With minimal competition and a wide marketing and distribution network, Tandy was hugely successful. Net income rose from $66.1 million in 1978 to $254.1 million in the 12 months ending December 1982. The stock went from a low of 3¾ in 1978 to 60¾ in December 1982.

And what of operational cash flow? Very positive in 1979, 1980 and 1981, mainly from computer sales. It rose to about $70 million in 1980 and settled back slightly in 1981, to around $60 million. But in the four quarters ending September 1982, Tandy's OCF suddenly fell to a record low of minus $78.5 million, and was still extremely negative for the four quarters ending December 1982 *(see chart)*.

Why? According to Paul Pappadio, the trend is negative because of great additions to inventory. For the first time, the buildup of computer inventories is outrunning even Tandy's continuing increase in sales. Garland Asher, Tandy financial officer argues that converting cash into inventory



where it can earn a better return is the best strategy. After all, he says, in 1982 Tandy's aftertax return on noncash assets was 25.4%, up from 19.6% in December 1980. He has an excellent point.

Following founder Charles Tandy's philosophy ("You can't sell from an empty wagon"), Asher argues the high inventories explain why Tandy's sales are doing so well: Customers are never confronted with empty shelves or long delivery time. Charles Tandy was one of the great retailers of all time.

It is true, of course, that Tandy is facing competition as never before. Not only from IBM and Apple, but from hordes of newcomers. Although it has continued to improve its color computer (from 4K to 16K) and to lower its price (currently $299), the machine is currently relatively expensive. Texas Instruments, for instance, starts its 16K computers at $150.

Tandy's stores blanket the nation, but competitive outlets are popping up like spring flowers after a warm rain. By the end of this year there will be some 6,100 computer stores competing with Tandy stores. Of Tandy's 8,800 worldwide stores, just 500 are pure computer stores and 675 others stock computers. There are more than 100 competing manufacturers of microcomputers, turning out machines by the millions for those competing stores.

Tandy will have to cope with a major shift in the market. "The next super growth area in the computer field will be the small business market [$5,000 to $30,000 computers]," says Dave Crockett, senior vice president of Dataquest, a Cupertino, Calif. consulting firm. In 1982 Tandy was number two in this market, with a 17% share. (IBM is number one, with a 25% share.) That might be a surprise to many who feel Tandy has a "hobby image," but it shows what being there first can do for a company. But to continue to make a mark in this market, says Crockett, Tandy can no longer depend on its excellent retail network but will also need a sharp professional image and a good direct-sales force with polished presentations: "All the big names are coming in, like NCR, Hewlett-Packard, Digital, Texas Instruments and Wang." Along with their names, these companies will bring direct-sales forces and potential links with the bigger machines a large- or medium-size business might already have installed.

What about home computers? In the under-$1,000 class, the competition has heated up. In this class, Commodore took the lead in 1982, with a 26% share. Tandy had 7%, placing a fifth in the competition. Apple leads the overall personal computer market ($1,000 to $5,000) with a 24% showing, vs. 10% for Tandy, giving Tandy a number four spot. Crockett notes, "The rest of the world is closing in on Tandy."

Maybe so. But Tandy is not sitting idle. Six new products are coming out this year. Especially impressive are the Model 12, which is an upgrade of the Model II, with more database storage, and a Micro Executive Work Station. The company is well positioned to enter yet another spectacular growth area, especially for small businesses—telecommunications.

Of course, any stock selling at 23 times earnings—as Tandy currently is—must be considered vulnerable to setbacks. But there is no real evidence that Tandy is slipping. The inventory buildup? As a lot of retailers found to their cost last Christmas, you can't sell goods you haven't got.■

What are a nice young architect and a Smith College art major doing in a place like the New York Futures Exchange? Just trying to make a killing.

The kids in the pits

By Barbara Ettorre

THE NEW YORK STOCK EXCHANGE seems to have hit on a winning formula for pulling out of the irons its laboring, two-bit entry in commodities trading, the New York Futures Exchange. Like some overaged Pied Piper, the august Big Board has succeeded in luring dozens of youngsters in their 20s and 30s to the pits of the NYFE (universally called, in the commodities trade, the "knife"). There the youngsters get the vaguely dubious privilege of risking every last dime they have saved for a crack at earning perhaps $100,000 a year or so in the most grueling finan-

cial pursuit of all, floor trading in commodities.

The big attraction is trading in futures contracts based on the Big Board's composite index of prices on the exchange's 1,520 common stocks. The contracts are valued at $500 per index point, so that at a March 1983 contract index price of 88.00, a contract would be valued at $44,000. To buy or sell that contract requires a margin deposit of only $1,500 for hedgers and members. Each move of 0.05 points creates a gain or loss of $25 on the contract. Not much, perhaps, for portfolio managers who are hedging by selling contracts when they are long in stocks and buying contracts when they are long in cash. Because they are hedging, the gains or losses on their futures contracts should be offset by losses or gains on their portfolios. The speculative risk is underwritten by the "locals"—the floor traders, among them those inexperienced youngsters, who are trading for their own accounts.

The introduction of the stock index contract reversed the failing fortunes of the NYFE and saved face for the Big Board. The NYFE opened for business in August 1980, and each membership initially cost $10,000. By February 1982, having been outgunned by other exchanges in building volume in such futures contracts as those for bank certificates of deposit and Treasury bills and bonds, the membership price had fallen to $4,500. After the stock index contract was introduced last May, the price rose to $35,000 and since has steadied around $28,000. For some impecunious locals, more money has been made in their memberships than in their trading.

FORBES spent a day recently with four locals. The lure of quick money and independence brought them to the NYFE. But the pace is killing even for the young. Michael Murray, 28, says: "I don't see myself doing this for more than seven more years."

On this particular day—compressed into a shouting, arm-waving chaos beyond the ken of the untutored mind—only about 15,000 trades get made, far below the recent high of 26,000. Murray and his cohorts, 4 of the 1,800 members of the exchange, arrive at 10 a.m. for the opening and stand on their feet through the 4:15 p.m. close. Not all were winners that day. Murray, for example, lost $700.

Judy Rosenblatt, 24, is the newcomer, leasing her seat (at $1,250 a year) and trading only one contract on the NYSE Composite Index. She has a degree in international business. "I lost money in the beginning," she says. "I'm just beginning to read the pit." To save money, she gave up her apartment and moved in with her grandmother. She runs to keep up her stamina and takes voice lessons to preserve her vocal cords.

Stories of broken health abound in the pit. There is the trader who developed nodes on his vocal cords and was out of action for three weeks. There are the tales of fallen arches, traders who missed an important move up or down because they were tending to laryngitis. No smoking is allowed on the floor, so traders slip away for one, two drags on a cigarette. Some eat several boxes of cough drops in a single trading day. Most don't eat lunch—or, if they do, they shy away from heavy carbohydrates that can slow them down.

Clockwise: Charrier, Rosenblatt, Murray and Lang

Laryngitis and leverage.

Rhonda Schreier Lang, 24, actually dreams of trades in her sleep. "I even get bored on weekends," she says. She joined at the peak of interest in the NYFE and recently paid $34,000 for her membership after leasing for eight months. "I worked at Sotheby's in London and then New York after I graduated from Smith," she says. "But this is immediate. It's all dollars and cents—and all your own doing." Lang is now up to trading 12 contracts, some 150 buying and selling rounds, a day. Her best day? $5,500.

Michael Charrier, 33, has an M.A. from Columbia and worked as an architect for TWA. He pops vitamins and smokes (typically only two drags per cigarette). "I think stock index futures will be limitless," he says. "They are going to be one of the most important instruments; the general public will be more interested as time goes by." Charrier, who plunked down $10,000 for a seat two years ago because he felt NYFE was the wave of the future, trades for his own account and for clients. He says his best day earned him more than $2,700. The traders dislike talking about their worst days, but in the pits one big losing day can wipe out gains from four winning days.

Murray bought his seat in March 1982 for $7,500. A former stockbroker, he commutes from Yardley, Penna. "I know I can make very good money and sleep very well at night," he says. His best day? $3,500. With a wife and child to support, Murray calls himself "a disciplined trader," who cuts his losses fast. He applies a combination of position trading (taking a longer-term position in the market), spread trading (buying one contract for a particular month and selling another) and scalping (moving in and out of the market at a tick, that $25 movement up or down). "You're a fool, a saint, a king, a greedy soul in this game," he says. "You really see yourself."

Just how much risk are these locals taking? Murray has a silent partner, with whom he splits his profits. His margin account at his clearinghouse is worth $60,000. Charrier's is $10,000, Lang's $20,000 and Rosenblatt's $12,000. Clearly, they cannot stand the $10,000 loss recently suffered by a fellow local. It takes almost iron nerves to stand such ups and downs. "I know at least 15 guys in the pit who were in combat in Vietnam," says Charrier drily. "They're calm in all that excitement."

With stakes of only $10,000 to $60,000, the fledgling traders hardly rank in the big leagues of finance. But on such skimpy underpinnings is the Big Board building its still tenuous claim to innovation in the financial markets. ■

"I'm going to sue. I'm going to embarrass you. I'm going to do everything to get my money back." That's the mayor of Yonkers, talking to Harry Gray.

Yonkers declares war on United Technologies

By Richard Greene

THIS IS ABOUT A CONTROVERSY in which both parties are right. It is also a story about how technology is changing our lives in ways none of us can predict.

In his plaque-lined office on the second floor of city hall in Yonkers, N.Y., Mayor Angelo Martinelli has been talking for a couple of hours now. He's explaining how much he loves business and how much businessmen love him. He points out the full-page newspaper advertisements, complete with his picture, which lured new corporate citizens. He talks about how his city of 200,000 people has come back from the edge of default.

Martinelli is calm, confident and occasionally exuberant. He's no antibusiness rabble-rouser. Quite the contrary. But then he changes the subject and all hell breaks loose. "We've declared war against United Technologies," the mayor exclaims, leaning forward urgently. "And it's not going to end until they've been beaten."

It all began in the early 1970s, when Yonkers' big Otis Elevator plant was employing about 1,500 workers and had the potential for adding hundreds more. There was talk about expanding in Parsippany, N.J. But Yonkers offered to do $14 million worth of redevelopment to make land available for an Otis expansion. The city acquired and ripped down homes and businesses and then sold the site to the company for $1.4 million.

Now, about eight years later, Otis is a subsidiary of United Technologies, and the firm is closing down its Yonkers plant. Not trimming it down. Closing it down. Otis hopes to lease the modern plant space to other firms. But it will never make another elevator part in Yonkers.

Both the mayor and the company agree on the story that far. But otherwise, their disagreement is vigorous.

Yonkers Mayor Angelo Martinelli
"Little David has his slingshot."

"United Technologies betrayed a trust," claims Martinelli. "We gave them $14 million worth of property for a promise of increased employment here. Now they're vacating the property and going into real estate. We didn't give it to them to be in the real estate business. Harry Gray, the chief executive, refuses to meet with me. So I went up to his headquarters in Connecticut with four busloads of people, and we picketed."

"I want reparations," the mayor says, now talking to a fantasy vision of his foe Harry Gray. "I want the $14 million back. I'm going to sue you. I'm going to embarrass you. It may be a David and Goliath fight, but little David has his slingshot."

But now pay a visit to William Drummond, plant manager for Otis Elevator in Yonkers. He hardly looks like a Goliath. Nor does he talk like a callous captain of industry. He looks more like a tired middle-aged man who has suffered in watching the once-important plant die. He sits in an office overlooking the largely vacant factory, now staffed with a remnant, just 220 workers. He tells a story, not of big-business rape and pillage, but of how technology is changing us all.

Drummond explains that this particular plant produced the mechanisms on the top of elevator shafts that received instructions about which floors to stop at and made sure the elevator did stop. Now, these parts are being replaced by microchips, which Otis doesn't make here or anywhere else. As the parts formerly manufactured evolved from mechanical to electromechanical, the plant shrank but hung on. The microchip spelled its doom. What's Otis to do? Continue to manufacture mechanisms that nobody wants or can use? The plant expansion, alas, was planned before people knew how far the microchip revolution would go.

Drummond points out that Otis spent $10 million in 1975 to build a new facility on the redeveloped property. The company, he explains, wouldn't have done so if it hadn't expected to stay. "I think there's a misconception here that somebody handed Otis Elevator $14 million," says Drummond. "That money was spent in relocating and tearing down buildings so that land could be used to build a factory. Otis bought that land at fair market value for $1.4 million. We could have bought land outside of Yonkers for less."

And that's where it stands. The mayor, who has spent the better part of the last eight years trying to get Yonkers on a sound fiscal footing, feels betrayed. At the same time, United Technologies feels that it has a piece of land for which it paid a fair price and which it certainly shouldn't be forced to give back to the city.

Call it a morality story of the microchip age. ■

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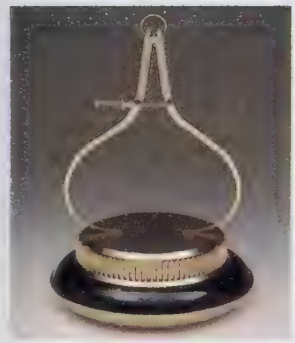
Motor Trend experts name Alliance 1983 Car of the Year.



Finalists were judged for styling and design, quality, comfort, ride and drive, handling, fuel economy, performance and dollar value.

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–Tony Swan, Editor
Motor Trend Magazine

And the European version of Alliance was named Europe's 1982 Car of the Year by 52 journalists from 16 countries.

Alliance DL 4-door

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Merrill's indigestion

Merrill Lynch has always been keen on snaring more blue chip underwriting business. So when the opportunity arose late in February to manage a $250 million preferred stock offering by J.P. Morgan & Co., Merrill jumped at the chance—too eagerly, it would seem. Merrill gave Morgan such a good price that the firm was able to sell only 50% to 60% of the offering. The rest of the shares are still in Merrill's account—and currently worth

15% to 20% below what it paid for them. That means a paper loss of about $20 million to $25 million.

The Morgan shares were adjustable rate preferred, dubbed ARPs. Income on these issues rises and falls with interest rates. ARP buyers are almost entirely corporations, which can deduct 85% of dividend income from their taxes. For corporations, ARPs could be a better buy than bonds or notes because of this tax feature.

What went wrong? The market was probably saturated with this kind of issue, which appeals chiefly to a specialized market. For, even as it was agreeing to underwrite the Morgan offering, Merrill was having trouble selling its share of a $400 million Citicorp ARP offering.—**Barbara Rudolph**

All at sea

Here's one strictly for contrarians. Martin Roher of San Francisco's Montgomery Securities is pushing Big Board-listed Overseas Shipholding Group. Considering that New York City-based OSG's 80-odd ships have been hard hit by the weakness in international trade and in the oil spot market, it is hardly surprising that its stock dropped from 34 in 1981 to as low as 10½ a year later. Nor did it help that OSG is saddled with more than a half billion dollars in debt, around half of its total capital. So why does analyst Roher like the stock? He points to its $175 million or so in cash and equivalents and predicts that OSG will use some of that money to buy more ships in the depressed market, thus positioning itself for a powerfully leveraged comeback when the shipping market strengthens again. None of that is reflected in the current price, about 16, which is only eight times depressed 1982 earnings. The nearly 26 million shares are selling at a 25% discount to book value. In a good year, says Roher, Overseas Shipholding could earn $4 or $5 a share. "An overlooked stock," the analyst calls it.—**Thomas Jaffe**

Bargain-priced technology

Will oil service stocks become the next takeover target? For companies wanting to buy high technology on the cheap, some of the oil service stocks are getting close to being screaming bargains; you could tender most of them at a 60% premium over market and still be paying only half what the stocks commanded at their 1980-81 highs. With a real earnings recovery at least a year away, many shareholders might be happy to sell. Rumor has it that a couple of giant, cash-rich nonoil corporations are shopping the oil patch with acquisition in mind. *(For more on this group, see Statistical Spotlight, p. 190.)*—**T.J.**

A can't-lose oil?

Talking about oils, a lot of people are attracted to that perennial takeover target, Superior Oil, now that ole Boone Pickens has accumulated 2% of its stock. But a very savvy analyst, Alan Gaines of New York's Baird, Patrick & Co., is advising his customers to forget about an early Superior takeover. One reason is cost. Superior has nearly 130 million shares outstanding, recently selling at 33. To get Superior, he figures, would require a 50% premium over market, $50 a share. More than $6 billion in all. If Pickens expects to find some acquisition-minded big company to take him out with a profit, he may have a long wait. Gaines figures you could not get Superior for a cheaper price because former chairman Howard Keck, who owns 12% of the stock, isn't in that much of a hurry to sell. If you want an oil stock, Gaines suggests Southland Royalty. Why? It's selling at around 15, which is just about half its appraised value, is not burdened with refining capacity and has a good exploration record. Cheap? It's down a bone-jarring 80% from a 1980 high. "Figure in exploration and dry hole costs, and this stock sells at just four times adjusted cash flow," he says. "How can you lose?"—**T.J.**

Sir Jimmy's appetite

Rumors always swirl around Sir Jimmy Goldsmith, the Anglo-French magnate who controls Grand Union and Diamond International in this country. Latest rumor has Goldsmith aiming his gun at David Mahoney's $3 billion packaged goods conglomerate, Norton Simon, Inc. We asked Goldsmith about it. He pointed out that the FTC would take a dim view of Grand Union and Norton Simon, which owns Hunt-Wesson foods,

Sir Jimmy Goldsmith
Disappointing the rumor mill.

coming under the same corporate roof. Besides, he chortled, "while the appetite for acquisitions is there, the wherewithal is not. People have grossly overestimated our resources." Oh, well. It sounded good.—**T.J.**

Computers are supposed to save time and money, but they can cost unsuspecting owners a bundle in legal expenses.

Beep beep— call a lawyer

By Richard Greene

IT'S A STORY THAT should send chills through the hearts of corporate officers everywhere: A large, well-known drug company licensed a computer program a couple of years ago from a software firm. One of the drug company's programmers, an electronic whiz kid in his 20s, copied the program, improved it and sold it.

The software company found out and sued. Though the whiz kid didn't go to jail, the drug company was lucky to settle out of court for about $3.5 million. The scary part is that the drug company never knew it was liable for huge penalties if the software it was using was sold.

That drug company was just one of 3,500 firms hit by lawsuits from software suppliers last year. This kind of litigation is growing fast, even though many large corporations don't even know there is a potential problem.

"Most corporations don't understand the liabilities they incur when they sign contracts with software firms," cautions Bruce Brickman, a counsel on computer litigation for law firm Braverman & Rosen. "One of the reasons is that their attorneys don't understand commercial contract law for the computer industry well enough to explain it to them."

That's easy to appreciate. The jargon of computers may be familiar to most 12-year-olds these days, but it's beyond any number of high-priced Wall Street lawyers. When you talk about stealing software, an old-time, precomputer attorney may picture someone sneaking into the night with a spool of computer tape. Actually, stealing software may simply involve making a phone call to the computer and giving it the proper access code.

The problem is compounded by the fact that in many firms the decisions about software are being made not by businessmen but by technicians more concerned with electronics than dollars and cents. "You boil it down," says Brickman, "and you have technical people making business decisions they are not suited for, supported by counsel that doesn't understand."

What's more, contracts that companies sign when they lease software are frequently very restrictive. They spell out where the software can be used, when it can be used, whether any copies can be made and who can have access to the software. A seemingly innocent act, such as using the software in a plant other than the one contracted for, can set off lawsuits.

According to Brickman, a large company shouldn't simply accept the standard contract for computer leases. Obviously, small firms acquiring relatively inexpensive software don't find themselves in much of a bargaining position. "But when you become attractive to the software vendor, he is generally willing to change his position," says Brickman.

Software firms, naturally, have to protect their stock in trade. But until companies leasing the software become more sophisticated in the attendant liabilities, they're going to find themselves in the courtroom time and time again.

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On the Docket

Patently unclear

Look closely at the financial reports of little high-tech firms that promise better mousetraps and you will often find a curious paragraph that disavows dependence on any particular scientific marvel. The fine print typically says that the company's strength is really in its research and management capabilities.

Why the disclaimer? Simply because, as a practical matter, patents are worth little less than the paper they're printed on for many small firms. Anthony Pantaleoni of Reavis & McGrath, a New York-based law firm, is an authority on the subject. Says he: "If another, larger company starts to produce virtually the same product, the only thing the small firm can do is try to get an injunction." But that may not be easy. As Pantaleoni points out: "Any good lawyer for the larger firm can drag that kind of litigation out for years. In the meantime, the smaller firm often just goes out of business."

"The only thing the small firm can do is try to get an injunction. But any good lawyer . . . can drag that kind of litigation out for years. In the meantime, the smaller firm often just goes out of business."

The sad truth is that, while litigation is debilitating to any company, it can be deadly to a small firm. Not only are there often immense legal fees, but managers also wind up devoting countless hours to the lawsuit that should go toward running the business. At the same time, the company's ability to get credit, generate sales and recruit new employees can all be hurt.

It all boils down to this: A patent is simply a piece of paper that helps you to sue. It doesn't stop someone from copying your product.

Rather than exhaust itself by fighting, the smaller firm can license its patent to the bigger firm and settle for a stream of royalties. But while that can help keep the company in business, it's small solace for an entrepreneur with an idea he thought was going to set the world on fire.

In any case, says Pantaleoni, "If a patent is the nub of an investment, watch out." ■

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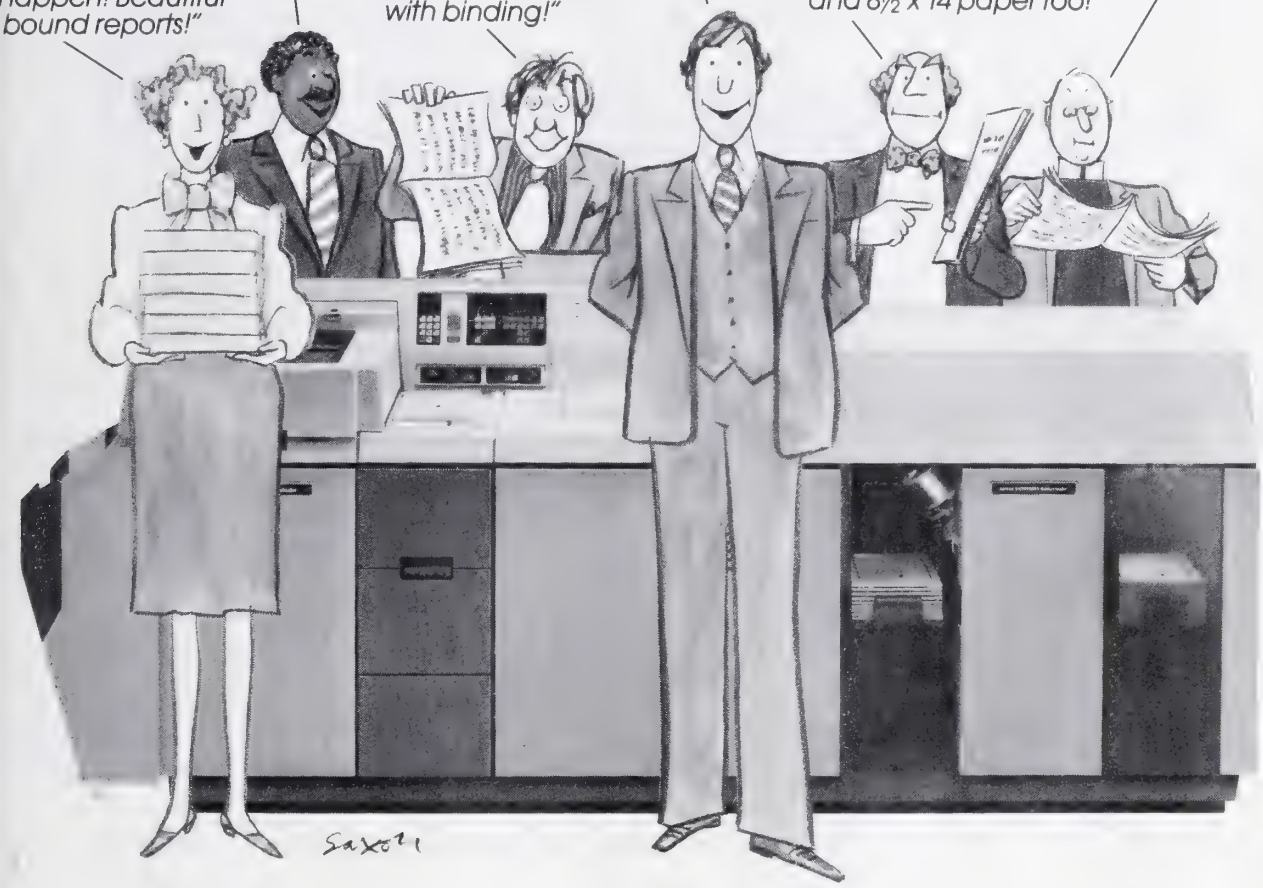

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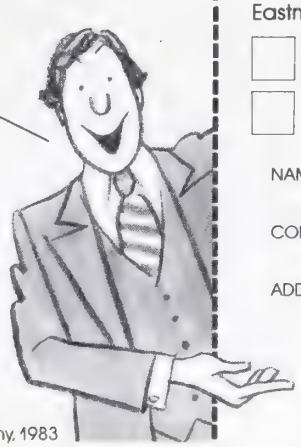

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American Motors' new Alliance is a show-stopper. These days, however, that's far from enough to make a smash hit in Detroit.

What's the second act?

By Steve Kichen

After spending $200 million, a mere pittance in the automobile business, American Motors appears to have its first winning product in decades. Last September AMC launched the Alliance, a front-wheel-drive compact, and despite a sluggish car market, sales took off from the start. AMC is currently shipping more than 10,000 units monthly, and production should reach a respectable 100,000 the first model year.

But smash hits take more than just good opening. AMC, 46%-owned by France's Renault, lost over $150 million last year and expects to lose even more in 1983. Even the French-designed Alliance is barely bringing in more than production costs, and the plant where AMC builds it is running at just 60% of capacity. The pressure to develop other successful models is intense. "We can't become just the Alliance car company," says AMC Chariman Paul Tippett.

The French, however, are still firmly committed to their $425 million investment. That's the reason José Dedeurwaerder, a key Renault executive, is in Detroit. He is the father of the popular R-9, the European version of the Alliance. It is made on some of the world's most efficient assembly lines and now the best-selling car in France.

Dedeurwaerder, now AMC's president, hopes to transfer a bit of this success to the U.S. He wants AMC to become a company known for providing top quality and good value. But any AMC image must be backed by products. That's the reason for AMC's current 5-million-share stock offering and the painful decision to sell the firm's profitable defense subsidiary.

The Alliance: AMC's comeback car
Front-wheel drive, great reviews.

These moves help finance development efforts.

Later this summer a totally new line of fuel-efficient Jeeps—the Cherokee and Wagoneer—will go into production at a modernized Toledo, Ohio plant. AMC has invested $200 million in the new Jeeps, multipurpose two-wheel- and four-wheel-drive vehicles that can be used as station wagons. Since margins are significantly higher on Jeeps than on cars, success here could be important.

AMC is also building a new four-cylinder engine derived from its well-regarded six-cylinder product. The four will be available in the new Jeeps and the four-wheel-drive Eagle. This should save money, since AMC now buys its smaller engines from Pontiac.

This fall the company will debut three-door and five-door hatchback derivatives of the Alliance. Beyond that AMC is unusually tight-lipped. There are rumors of a station wagon version of the Alliance, and Renault is likely to build Americanized versions of its European models here if there is sufficient demand.

Meanwhile, simply having the Alliance in the showroom is a boost to AMC dealer morale. The car has drawn rave reviews from critics and gets better mileage than any domestically produced competition, even though many AMC salesmen must adjust to different kinds of customers from those who liked the company's dowdy older models. "People who look at the 18i [a larger Renault imported from Europe] and find it too expensive can be steered to the Alliance, and vice versa," explains Paul Franzetti, sales manager of Lakeview Motors in Westwood, N.J. "I couldn't do that with an AMC Spirit."

Leverage, of course, is the great potential for AMC. Much of the reason is that its shares have gone from 2⅜ to 7⅞ over the past 13 months. Like its competitors, AMC has cut costs dramatically since 1979. The number of salaried employees is down by 15%, and in addition the company has negotiated a labor contract second only to Chrysler's in terms of savings. AMC lost a mere ten cents per share in the fourth quarter of 1982, down from 85 cents the previous year. If AMC could ever approach even 85% of total capacity, earnings on an annual basis could reach $6 to $8 a share, according to Al Nelson, an analyst at A.G. Becker.

Part of the reason is that, despite its age, AMC's Kenosha facility is one of the nation's most integrated auto plants. Kensoha still needs some modernization, but AMC and Renault have wisely put their money into the most critical areas: advanced computerized die repair, robot welders, an automated paint booth and extensive rustproofing. This, plus the fact that workers know that the Alliance's success is crucial to keeping their jobs, gives the car a fit and finish that AMC boasts can match anything coming out of Japan.

State-of-the-art quality is a far cry from AMC's image as a manufacturer of specialized—some would say oddball—vehicles. But that's where Renault wants to reposition the firm. "We can't survive anymore by going after tiny niches, sticking on the wall like flies and hoping nobody will find us," explains Tippett. As it strives to reposition itself in the marketplace, however, AMC is no longer a pioneer. It was the last American manufacturer to offer a front-wheel-drive car, and the new down-size Jeep must compete with General Motors' Blazer and Ford's Bronco II.

Tippett sees this as a virtue. "Last in, best dressed," he explains. Whether that's enough to insure AMC a role in the automobile business, however, remains to be seen. ■

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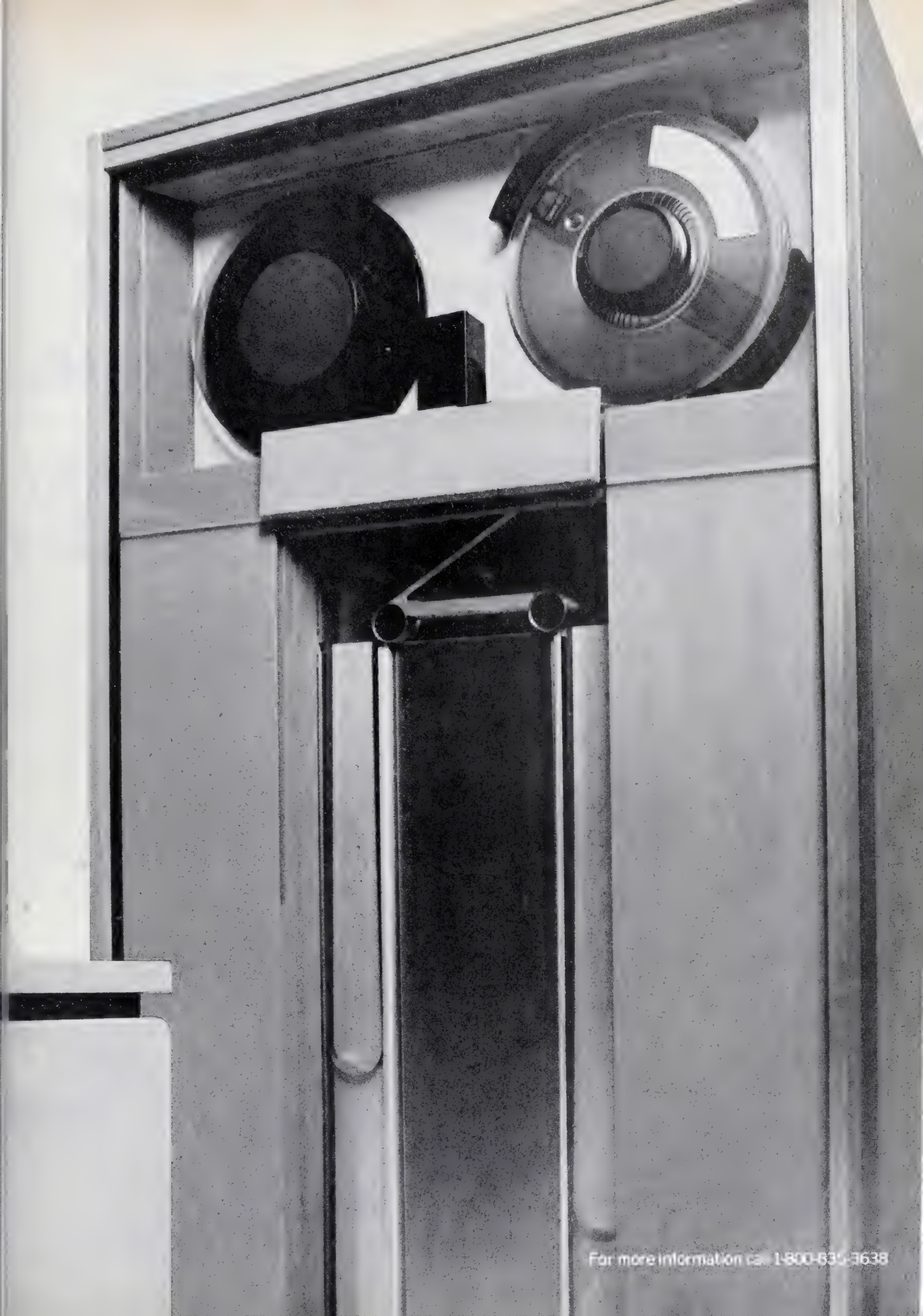
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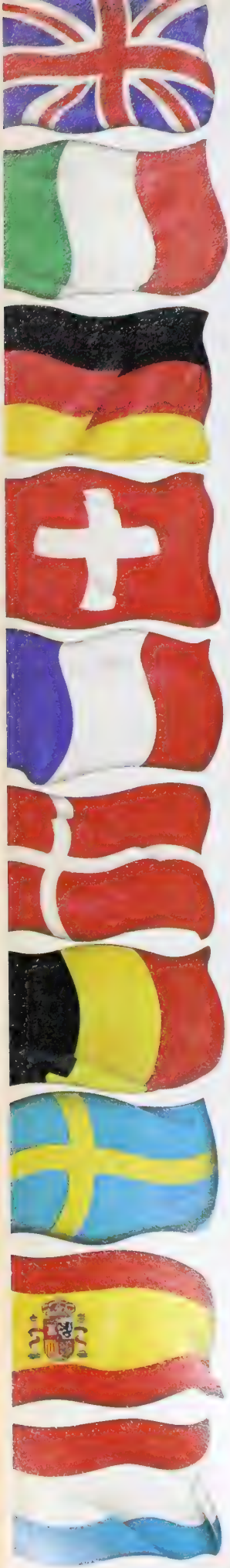

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M/A-Com seems to have recovered nicely from 1982's earnings collapse. But look again. You might be surprised.

Out with the old, in with more of the old

By John A. Byrne

LAST SUMMER M/A-Com, Inc.'s fall was classic. The Massachusetts-based electronics company was in two hot markets—telecommunications and cable television—and it sported a multiple as high as 33 times earnings in 1981. Then came a surprise quarter when earnings slid by 20%. In a matter of two weeks M/A-Com's share price slumped from 20 to 12¼.

Investors, however, have short memories. M/A-Com, which earned $34 million last year on revenues of $588 million, expects to report its fourth straight quarter of declining operating income comparisons. And the firm has warned that its 1983 results may trail those of 1982. But share prices are soaring: M/A-Com's stock now commands a lofty multiple of 37, selling for more than it did before last year's debacle.

The enthusiasm isn't caused by a new management team, either. True, Dr. Larry Gould, the former chairman whose flair for acquisitions helped create M/A-Com, is now gone. Gould, who in his final days moved his office to Boca Raton, Fla. and communicated with corporate headquarters by a private teleconferencing system, left quietly after M/A-Com agreed to pay him $149,450 annually until 1990 as a "half-time consultant." His successor is Richard DiBona, 49, M/A-Com's pipe-puffing chief operating officer since 1976 and a man who shares every bit of the blame for the company's current troubles. Like Gould, DiBona has spent virtually his entire career with M/A-Com, and he hardly seems up to the job of putting the company back on the fast track.

Many of M/A-Com's problems stem from Gould's attempt to grow too fast. When he became chief executive in 1975, M/A-Com—then called Microwave Associates—was a staid maker of electronic components. Gould cultivated friendships with entrepreneurs at small companies and began shopping for acquisitions.

When earnings started up, so did M/A-Com's stock price—fueling still more acquisitions. His greatest coups were Digital Communications Corp. in 1978 and LINKABIT Corp. in 1980. In one 15-month period, Gould gobbled up a dozen companies. "We put too much pressure on short-term performance," says DiBona. "That's how you may end up making investments that are either reactionary, opportunistic or misdirected."

Consider Ohio Scientific Inc., a small computer manufacturer. It added a few cents to M/A-Com's earnings in 1980, but the company soon began losing money. After its founder left to do corporate research, M/A-Com installed three sets of managers who knew little about the small computer business. The upshot: During a boom in small computers, Ohio Scientific's sales last year fell by more than half, to less than $8 million. In November, M/A-Com sold the company and declared a $10 million loss.

"We overestimated the company's strengths," explains DiBona. "The problems could have been fixed, but the cost wasn't worth the effort." Interestingly, however, Kendata Inc., Ohio Scientific's new owner, has booked more business in three months than M/A-Com did in its last full year. Kendata expects to end its first year with Ohio Scientific in the black.

M/A-Com's Richard DiBona
"We put too much pressure on short-term performance."

There were other problems, too. At Lawrence Laboratories, a foundry bought in 1980, M/A-Com lost another entrepreneur. "He took everything with him in his head," says DiBona. "We had to reinvent the wheel." Result: a $2 million loss last year at a company with sales of only $5 million. M/A-Com's Prodelin, which makes satellite earth station antennas, however, fared even worse. It reported a $5 million inventory writedown last year on sales of $10 million.

Unfortunately, M/A-Com's problems will take more than a few fast writeoffs to cure. They reflect poor planning and poor judgment, and there is little indication that DiBona has improved on Gould's weaknesses. M/A-Com is also caught in a classic profit squeeze in the $350 million-a-year

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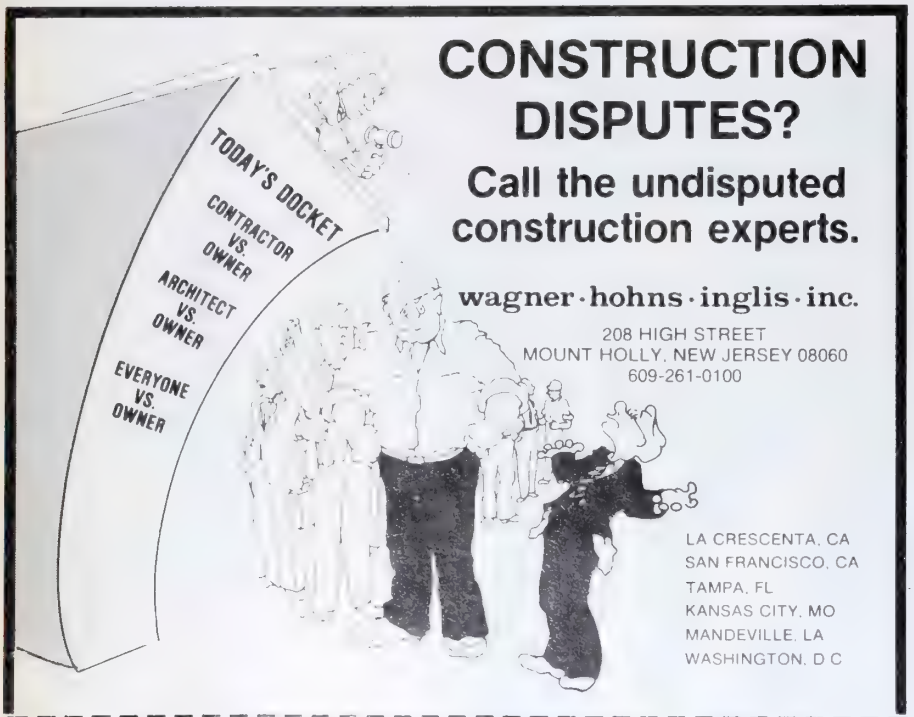

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market for coaxial cable, where it gets more than one-third of total revenues. Less than two years ago, M/A-Com was optimistically telling shareholders this market would triple within five years. Now management expects it to remain flat.

Similarly, M/A-Com had high hopes for a joint venture with Philips to produce optical fiber cable. In the last two quarters, however, the deal cost M/A-Com $2.5 million in red ink. DiBona backed out of the two-year-old partnership in February, and Philips is so furious over the whole matter that it has obtained an agreement with DiBona that prevents him from discussing the venture.

Despite the management blunders, M/A-Com's potential is impressive. Its $213 million components division, a supplier for every major U.S. tactical missile, boosted profit margins to 16.8% last year from 15.7%. DiBona foresees growth of 30% to 40% yearly over the next five years from his recently reorganized Integrated Digital Communications group. IDC sells satellite communications and electronic news-gathering gear, as well as packet-switching equipment.

Part of The Street's renewed enthusiasm might be based on the "What-else-can-go-wrong?" theory. "After all," says First Boston's Marc Schulman, "you can't find a new way to lose $1 million or so every quarter."

Talk like this excites institutional investors, who still own more than 40% of M/A-Com's shares. Part of The Street's renewed enthusiasm might be based on the "What-else-can-go-wrong?" theory. "After all," says First Boston's Marc Schulman, "you can't find a new way to lose $1 million or so every quarter." Another investment analyst adds: "Executives there are still more concerned with the stock price than with fundamentals."

DiBona, like Gould an MIT graduate, sees things differently. "This company," he boasts, "is loaded with entrepreneurs. We have 33 millionaires here, and they stay because of the environment. It is a way of cashing in and still having your game to play." The difficulty for M/A-Com is that its current success depends on playing by slightly different rules. Gould clearly didn't have the discipline to impose them—and so far there is little evidence that DiBona does, either. ■

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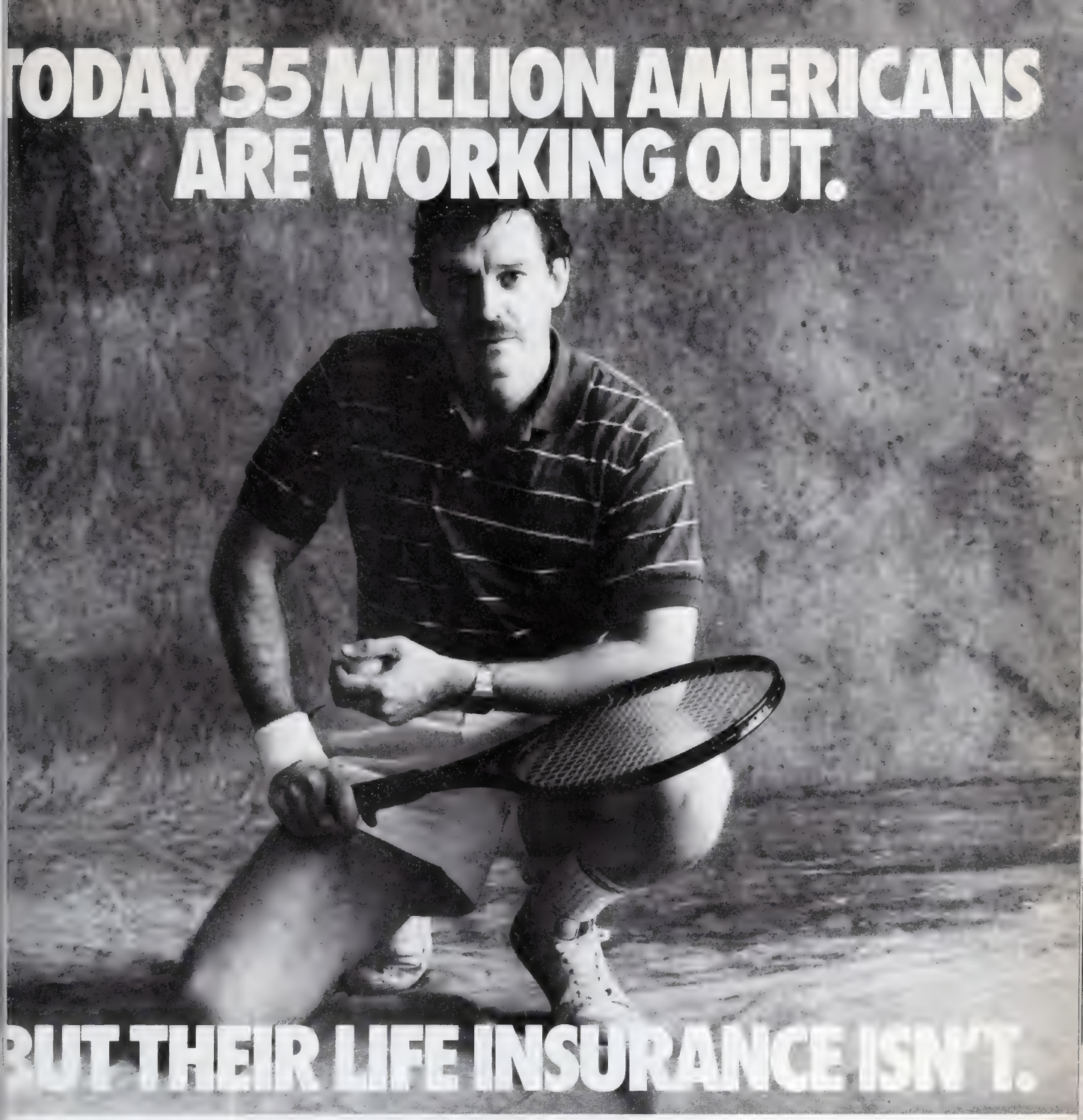

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Is the savings and loan business fundamentally safe or sorry? "Safe," proclaims Elliot Knutson—and proves it.

Gift to be simple

By Roger Neal

HOUSING IS COMING back, but a lot of savings and loan institutions, burned badly in the last two years by negative interest-rate spreads on their portfolios of 30-year mortgages, are reluctant to commit heavily to such lending again. Instead, they are seeking diversification into business and consumer lending and even commercial leasing. Not so Seattle-based Washington Federal Savings & Loan. President Elliot Knutson, who has brought his $700 million assets company through the bad years in good shape, is looking forward to fresh opportunities to lend to home buyers. "Real estate can be the safest investment, if done correctly," he says.

What keeps Knutson's anxiety level low is Washington Fed's healthy net worth, which at 11.13% of assets is more than double the S&L industry average. The company's return on assets in normal years, from 1975 through 1979, say, ranges from 1.3% to 1.9%, 2½ times the industry average. Even in a bad year like 1981, Washington Fed posted a profit of $6.2 million.

Last year Washington Fed showed a $19.7 million net loss. That's because Knutson sold $108 million of low-yielding mortgages. He took his lumps but also reduced the company's tax bill by $7.6 million and raised its portfolio yield substantially. Knutson reckons that such conservatism is the best way to prepare the company for good times, or to protect it should interest rates rise again. Buttressed by its strong balance sheet, Washington Fed is currently holding on to $4.4 million worth of foreclosed real estate, confident that an upturn will take it out whole.

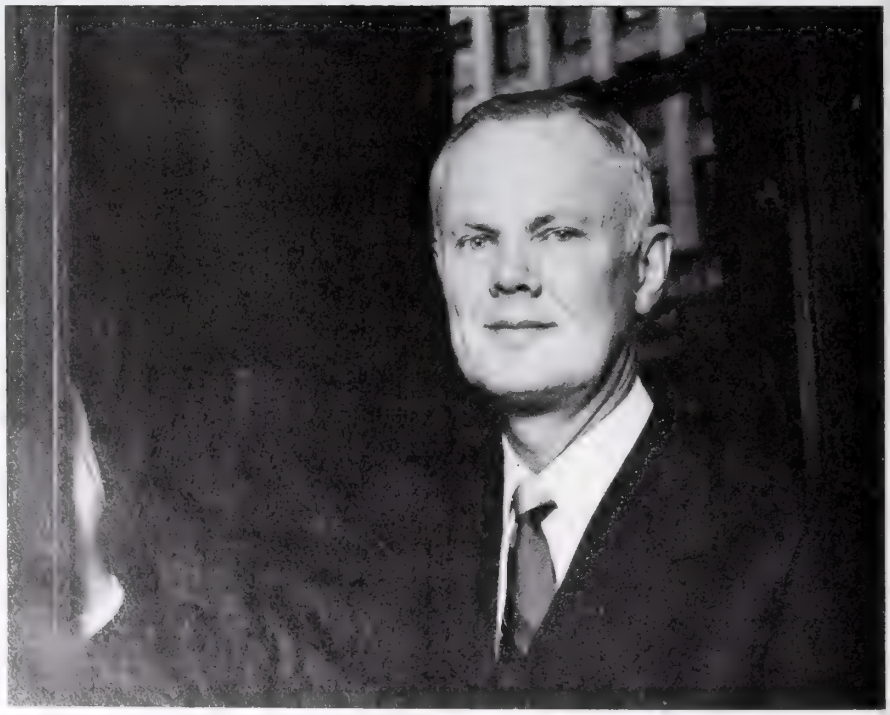
Knutson, who favors a small, Spartan office off the front door of the S&L's main branch in downtown Seattle, did have a secret asset helping him to keep the company so healthy: Washington Fed has always done a tidy business in floating-rate construction loans. Two years ago, when interest rates began their rise, he built up builder financing to 25% of the company's portfolio and saved it from the worst of the mismatches that hit most S&Ls. But note, the asset there wasn't the builders' loans, but Knutson's timing.

That timing was evident again last November when he converted Washington Fed from a mutual to a public company. Coming to market with 953,857 shares at the bottom of the recession may not have raised the maximum amount of capital, he explains, but it did give depositors and employees, who had first shot at the new stock, a chance to buy in at a bargain price, $11.75. The stock currently sells over-the-counter for $27.

Knutson, 58, seems entirely at ease relying on his own judgment. He is, after all, a former marine who learned banking at evening trade school and quit Seattle First National Bank 21 years ago to enter the S&L business.

Thus, after last fall's sale of unprofitable mortgages, Washington Fed's underwriter, E.F. Hutton, urged him and Chief Financial Officer Guy Pinkerton to invest the proceeds in short-term CDs and Treasury bonds. "That was sexy," observes Knutson, who didn't follow the advice. Instead, Knutson and Pinkerton poured $130 million into Ginnie Mae and Fannie Mae paper, locking up high yields just before interest rates fell. Knutson reckons they came out $20 million to $30 million better off.

What does Knutson see immediately ahead, now that Washington Fed has returned to profitability in the first quarter? "I don't think growth in housing will be explosive," he cautions, "but it'll be pretty doggone good." One thing is sure: Elliot Knutson won't be diverted by fashion from business that he knows is fundamentally safe. At Washington Fed, he says, mortgage lending is "done correctly." ■



Washington Federal's Elliot Knutson
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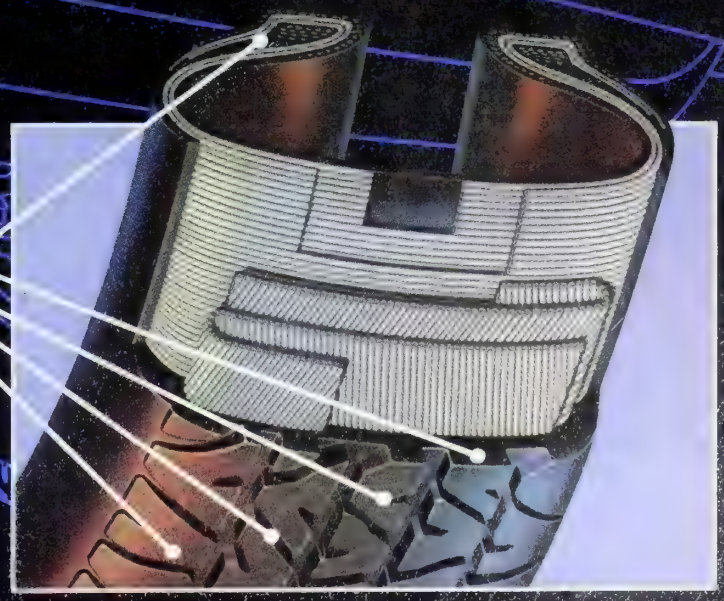

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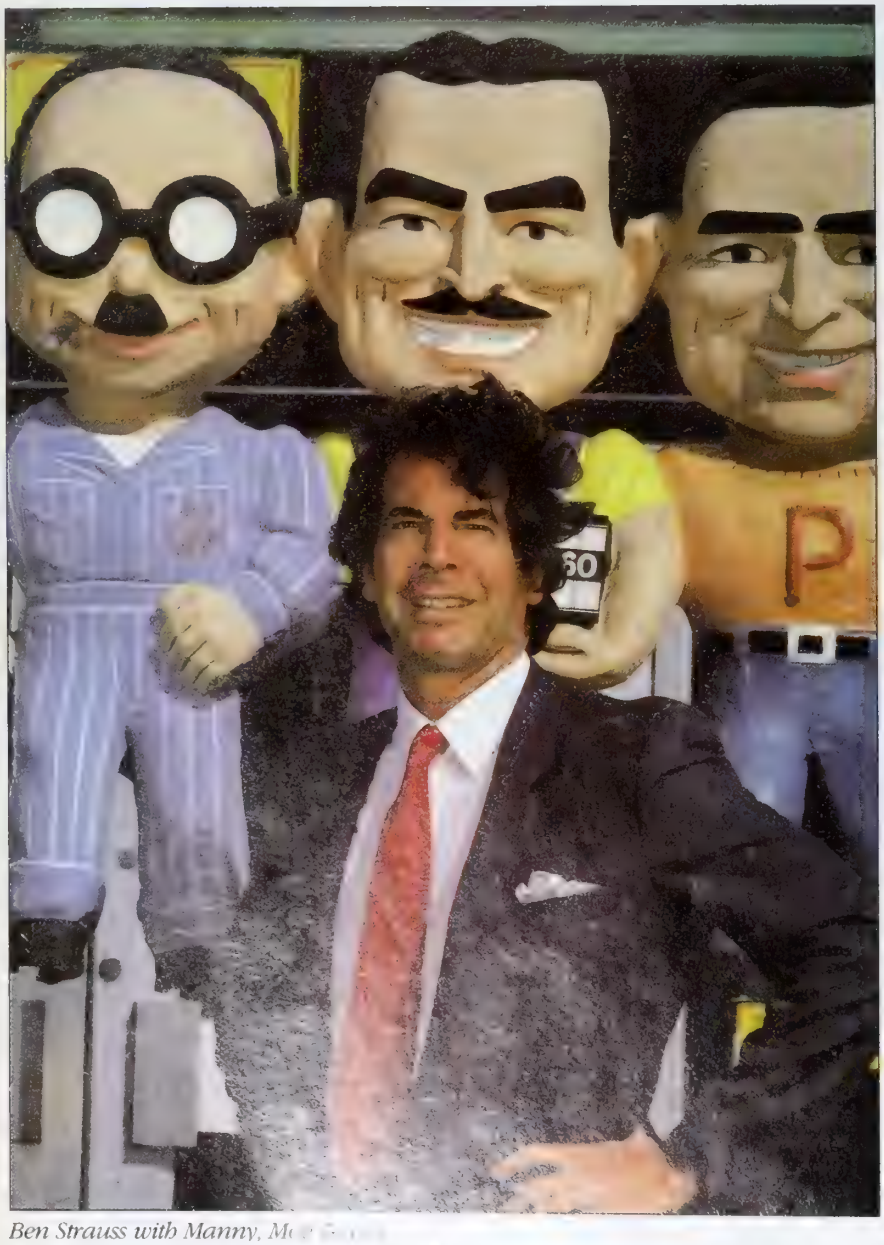
Campy images aside, Manny, Moe & Jack weren't really all smiles. But now the auto parts business they founded seems poised for healthy growth.

Boys 'r' us?



Ben Strauss with Manny, Moe & Jack
"I wish Moe could see the numbers."

By Christine Miles

MIDWESTERNERS think they're a singing group. Johnny Carson makes them the butt of jokes. But never mind. Over the past 62 years the Pep Boys—alias Manny, Moe & Jack—has become one of the nation's leading auto parts retailers. With a little more than half of the chain's 112 stores in Los Angeles and the rest situated between New Jersey and Washington, D.C., the grinning faces on the corporate logo smile at one another across the continent.

That makes everything seem fine. But for decades it wasn't. Differences between the two markets and physical separation of the partners made Pep Boys a hotbed of rivalries and family squabbles. Now things are changing at the $265 million-a-year chain. Moe Strauss, the last original Pep Boy, died in July at 85, and a new generation of managers seems prepared to make some long-delayed restructuring. "Internal competition has subsided, and a stronger merchandising teamwork has emerged," says Goldman, Sachs analyst Joseph Ellis.

Fortunately, Pep Boys has a strong base on which to build. Margins are strong, and revenues were up 14% last year. The chain is almost debt free and owns most of its own locations, including considerable prime Los Angeles real estate. Analysts are predicting a 16% earnings gain in 1983, to $5.40 per share. At a current multiple of 15, Pep Boys' thinly traded stock (48% family owned) is near its alltime high of 77½. Shares are trading at 70 on the Amex, and there are rumors of a stock split.

The business began in 1921, when Manny, Moe and Jack pitched in $200 apiece and opened the first red-front Pep Auto Supplies store. It was on a warehouse-lined section of Philadelphia's rutted Allegheny Avenue, near the firm's current headquarters. Almost immediately, however, the partnership became a revolving door. Jack left the first year and Izzy Strauss, Moe's brother, replaced him.

Then Izzy broke off to form Strauss Auto Stores in the New York metropolitan area. Moe, meanwhile, decided to expand in California. He dispatched Murray Rosenfeld, Manny's brother, to the West Coast.

From then on, Pep Boys was almost two separate companies. The auto parts business is cutthroat in Los Angeles, where some 45 retail companies vie for customers. This forced Rosenfeld to update aggressively. Along the way, he developed a highly effective mix of discount prices and

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broad quality-brand inventories. The family connections came full circle, too. Rosenfeld's understudy was Morton (Buddy) Krause, Moe's son-in-law.

Meanwhile, in the East, Moe's marketing philosophy centered on discounting. This served the chain well against other independents. But when giants like Sears and K mart entered the business, demand for higher-priced merchandise grew, and Pep Boys was slow to change. Moe stayed too long with small storefronts, old locations and cheap inventory.

In 1979 Krause took over in the West, and Pep Boys' coastal rivalry became more apparent. His operation was leading the company in revenues and margins, but Moe opposed spending money to modernize back East. "It was tough sledding for a while," admits Moe's son Ben Strauss, the company's current chief executive, "but now some of the stores Moe objected to are doing so well I wish he could see the numbers."

Another change at Pep Boys is the opening of several ministore locations without service bays. "They were up, running and profitable in a very short time," says Strauss. The ministores complement Pep Boys' full-service stores, which fill the void left by service station shutdowns. Pep Boys' strength on both coasts provides access to 25% of the nation's motorists. As a result the chain has the jump on such competitors as Firestone and Goodyear, which are moving to compete more aggressively in the auto parts business.

Even the battle with K mart and Sears seems to be tilting in Pep Boys' favor. "K mart has no sales help, and Sears markets everything under their own brand," says Jack Creamer, a Connecticut-based auto aftermarket consultant. "Pep Boys stays very price competitive. They have trained sales help, and they use national brand selling strength to draw customers in."

Pep Boys' second-generation executives also are finding out how to court Wall Street. "We hope investors will think of us as a growth retail stock like Toys 'R' Us rather than a cyclical retailer," says Mitchell Leibovitz, chief financial officer and general manager of eastern operations. "After all," he points out, "it's a buyer's market for the locations we need." An example: Some of Pep Boys' best new stores were once abandoned inner-city supermarkets.

Settling back in the company Jaguar (license plate: PEP BOY), Strauss starts talking about another hidden asset. Items featuring that familiar Pep Boys logo, he explains, are a popular sideline. For example, a T-shirt emblazoned with the image of Manny, Moe & Jack sells for $4.95. Also available: no-spill commuter drinking cups and baseball caps.

This may be just a hint of the profits to come at Pep Boys, now that the smiles at corporate headquarters finally seem for real. ■

Jess Hay has insulated his company from interest rate shocks. Others, please copy.

How to make mortgages and sleep soundly

By William Baldwin with Jessica Greenbaum

THE LAST SEVERAL YEARS of interest rate chaos should have been hellish for anyone in housing finance. Yet mortgage banker Lomas & Nettleton Financial Corp.'s earnings have risen uninterruptedly since 1974, to $20.9 million on $134 million revenues in the fiscal year ended last June. For the first half of fiscal 1983, net was up 34%, to $12.8 million, or $1.76 a share.

How come? Because Jess Hay, Lomas' poised, slow-talking chairman, has made it his business to avoid risk. "Mortgage banking is a middleman's function," he says. "We've stayed in the middle." Hay, 52, was a lawyer and outside board member in 1966 when Lomas' creditors called him in to run the company after it had become dangerously overextended. He liquidated $70 million of the firm's assets and cut headquarters staff by half. Then he began a steady expansion that has made Lomas the largest mortgage banker in the U.S.

Like the shaky savings and loan industry, mortgage bankers stand between homeowners who consume capital and investors who supply it. The principal difference is that, while S&Ls gather housing capital mostly from small savers, mortgage bankers look to pension funds, insurance companies and wealthy individuals.

Lomas has some lucrative sideshows, like lending to home builders, but its core business is servicing $17 billion of mortgages—collecting the monthly checks, dunning late payers and making sure property taxes and fire insurance premiums are paid. These are typically loans guaranteed by the Federal Housing Administration or the Veterans Administration and packaged into Ginnie Mae (Government National Mortgage Association) securities and sold to investors. Servicing fees of just under 0.5% of the loan balance annually leave plenty of profit margin for an outfit like Lomas, where large computers do the work. Its return on equity, about 20% currently, is almost double that of the average firm surveyed by the Mortgage Bankers Association.

The company doesn't sit back and wait for fee income to roll in. For one thing, it benefits from its control over escrow balances—the money for taxes and insurance collected in advance from homeowners. Federal guidelines say interest earned on escrow funds should be passed along to the homeowner. Lomas, with $300 million in escrow, neatly sidesteps this requirement. Instead of depositing, say, $1 million of escrow money in a bank at CD rates, it may leave the money in a no-interest account, then have the bank lend back $2 million at half of normal rates. Cheap capital for Lomas and zero interest to homeowners (except in states with their own escrow laws). Unfair? Not really. If the company were forced to forego use of escrow balances, it would make it up on higher fees elsewhere.

There's more hidden gold in the servicing business. FHA and VA borrowers are an easy direct-mail target for insurance, especially credit life insurance that pays off the mortgage if the breadwinner dies. Lomas' insurance operations, which generate $14 million a year in revenues, have pretax profit margins of up to 41%.

The mortgage portfolio being the golden goose of service income, mortgage bankers work constantly to fatten it. Lomas & Nettleton last summer acquired Advance Mortgage Co. for $69 million, adding, in one transaction, $4.9 billion to its servicing portfolio. The other way to keep from shrinking, as old loans are paid off, is to make new ones.

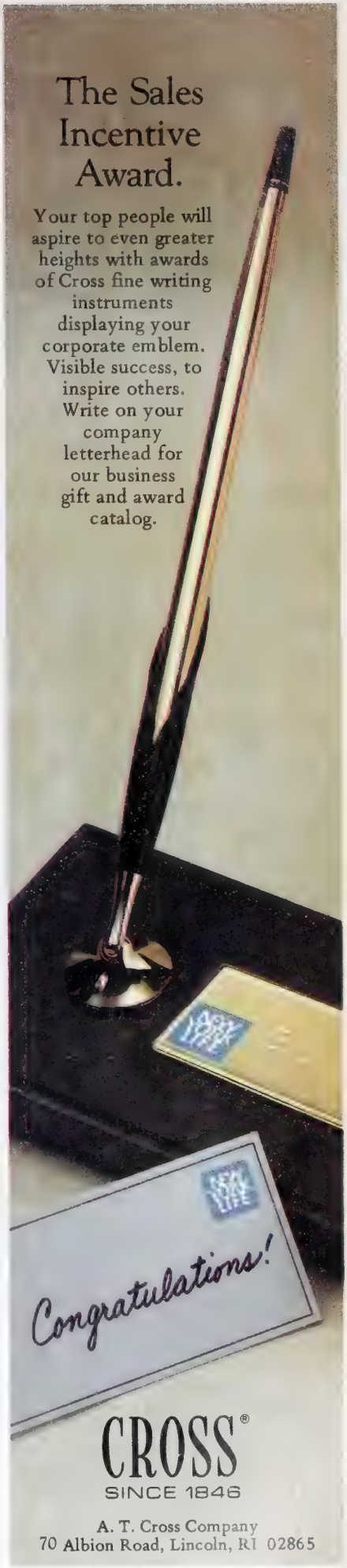
Now, most mortgage bankers take a loss to originate a mortgage, since the 1% processing fee the FHA permits doesn't cover costs. But not Lomas, which expects at least to break even booking new business. "It's not a perfectly priced commodity," says a Lomas official. "There's a lot of service involved in getting the loan closed quickly, making the real estate agent happy, the builder happy." Recently Lomas was quoting Houston loan applicants a price of 96 for a 12% FHA loan (put another way: They were charged 4 points), terms slightly less favorable than those offered by competing lenders. Lomas was simultaneously selling those mortgages for May and June delivery in the form of 11.5% Ginnie Maes—the missing 0.5% being the servicing cost—at a price of about 97. A nice 1-point markup (better than Lomas usually gets), with little risk to Lomas. The Ginnie Mae buyers take the risk that interest rates will shoot up while the loan is being processed.

But there is another problem besides interest rate fluctuations: chronic inflation, which prices traditional fixed-rate mortgages and their FHA and VA customers out of the market. Lomas has hedged with its new variable-rate, graduated-payment mortgage. This item accounted for nearly half of Lomas' $573 million loan volume in the first six months of 1982, when fixed-rate mortgages seemed all but dead, and even now is good for $20 million a month.

Jess Hay, chief executive of Lomas & Nettleton
The safest road is the middleman's.

Home buyers are leery of variable-rate loans, but Lomas is trying to educate them. "It's an attractive product, even with interest rates down," says Hay. "It means a young couple making $30,000 can qualify for a home that otherwise would require an income of $40,000." Variable-rate mortgages are not eligible for FHA and VA guarantees, and investors are leery of securities that don't have such guarantees. But perhaps they can be educated, too. In July, Lomas plans to commence sales of a variable annuity tied to non-government-guaranteed, variable-rate mortgages. It hopes to be selling $200 million a year of the product by 1985.

How does Lomas & Nettleton thrive? By practicing banking in its purest form: mere brokering. "We don't take any more risks than you have to in this business," says Hay. Easier said than done, but something that every bank, and S&L, must learn to do. ■



The calmest executive in the tobacco business isn't someone you've heard a lot about.

Livin' easy at Universal Leaf

By William Harris

WHILE THE BIG CIGARETTE brand marketing wizards get ulcers struggling over market share and fervently wishing the Surgeon General would go away, Universal Leaf Tobacco Co. of Richmond, Va., the world's largest tobacco broker, has been quietly and profitably minding its own business behind the scenes.

Universal (sales, $1.3 billion) couldn't care less about cancer scares or the fight among those 250 cigarette brands for the consumer. It just keeps doing what it has been doing since 1918: supplying the tobacco it buys from farmers in 20 countries to the world's major cigarette makers. Philip Morris, its largest customer, takes 38% of sales.

Last year Universal's earnings climbed 10%, to $34 million, or $3.93 a share, the twelfth consecutive year of growth despite two recessions. Profit margins are small, typically some 3%, but Universal's return on equity has averaged 18% over the last five years. That, when long-term debt is less than one-fifth of the company's total capitalization.

What is Chairman Gordon Crenshaw doing right? "I don't know," shrugs the taciturn, silver-haired Crenshaw, 61, who has run Universal Leaf for the last 18 years. But he does know a few things. All about the 120 grades of tobacco—like wine vintages—as well as which ones can be substituted for each other. A high-quality Zimbabwe leaf, for example, can be used in lieu of Virginia tobacco in many cigarette blends. The taste is comparable.

Crenshaw also knows where to tack on the fees for special services, such as removing the tobacco stems packing the tobacco into hogsheads and shipping it to factories. Unlike the old days when Universal bought on speculation, Crenshaw knows to have his orders in hand long before harvest time. There are competitors around who will do exactly the same things at pretty much the same prices. But in this service business, a customer rarely defects if you are dependable. Crenshaw is dependable.

Universal Chairman Crenshaw
How's he do it? "I don't know."

Clearly, Universal has benefited from the growth of Philip Morris, a customer since the 1930s. But Universal helped that company get going. In the early days, when Philip Morris was up against already well-established giants like R.J. Reynolds, Universal actually financed the tobacco purchases with which Philip Morris was building market share. That help has not been forgotten.

Still, even Philip Morris has now started building up its own buying force, which means it will not be depending on Universal for as much of the stuff it shreds and rolls into Marlboros, Virginia Slims and Merits (Crenshaw's own favorite, which he smokes continually).

Although Crenshaw refuses to talk about his relationship with "any particular customer," he's not too worried about a big chunk of business going up in smoke. After all, Philip Morris has only 15 buyers out in the field. Even if it eventually does buy most of its tobacco directly at the auctions, as Reynolds and American Brands already do, Philip Morris will still have to rely on Universal for the troublesome chores: to clean, pack and ship the tobacco to its factories.

Also, Universal already has a strong presence abroad. At least 30% of the tobacco now found in U.S. brands is grown in such places as Brazil or Malawi, compared with only 14% a decade ago. Although the quality of foreign tobacco is not considered as good as that grown in the U.S.—quality chiefly means nicotine content, which gives tobacco its taste—the foreign leaf is about half the price, thanks to the farm price-support system here.

Universal, quick to realize the salability of offshore tobaccos as filler in American cigarette blends, was one of the first brokers to set up shop overseas, back in the 1930s. That move has continued to pay off for other reasons. Now Universal sells to such foreign customers as the Rothman Group, the Scandinavian Tobacco Co. and the Japan Tobacco monopoly. Foreign tobacco consumption is growing 2% annually vs. a 1% decline in the U.S.

Such a smoothly humming company, such an ample cash flow—now $5.15 per share—why hasn't anybody tried to buy up the 8.7 million shares outstanding? In 1976 Congoleum Corp. did. Problem? No. In his low-key way, Crenshaw simply let it be known that if Congoleum stepped in, he and his top management would walk away. They are the ones who maintain all-important personal contacts with the likes of the Japanese tobacco monopoly (the largest foreign buyer of U.S. leaf). Congoleum, realizing it would be holding an empty bag, slunk away.

For a fellow who claims that he doesn't know what he's doing, Gordon Crenshaw is getting along just fine and dandy. ■

BUSINESS Communications

A Forbes Special Advertising Supplement

Business Communications Applications for Increased Productivity

It is a paradox of our times that in an era in which technology advances at an unprecedented pace, we should still be concerned with problems of productivity.

Certainly, in at least one significant area—information—the strides we've made are monumental. And information, and communicating information, are major tools we can use to improve productivity. But still, there is a gap. There is a great leap yet to be made between what we know and how to use what we know to good effect.

What can be done to bridge that gap? How can modern technology, particularly in the highly-developed art of communication, be applied to improve our rate of productivity?

To answer these questions, let's take a close look at some of the elements involved: the realities of productivity; the state of the art in business communication; the application of the state of the art to the realities.

Productivity

This is a world in which the resources we can bring to bear in industrial production—labor, raw material, capital—are finite. There is just so much labor, so much raw material, so much capital. But the needs of the world, because of population growth and other factors influencing economic demand, continue to grow. They seem infinite.

The core problem, then, would seem to be how to leverage the finite resources of the world to meet the growing and infinite needs of our population and our economy.

One authority, Charles H. Kepner, in an excellent paper, "Productivity—Where It Went and How We Get It Back," defines productivity as the relationship between resources put into a process and the value received as a result. The greater the difference between input and output, the greater the productivity. The more it costs to make that product or deliver that service, measured in capital, labor and raw material, the lower the productivity. Unless that difference—that margin—widens from year to year, productivity stagnates. Costs rise, margins are reduced, and the individual company becomes less competitive, less profitable. When entire industries are thus afflicted, the economy itself stagnates. The goal, according to Kepner, is to make better products at lower cost this year over last and to increase productivity in each subsequent year.

During the generally halcyon years following World War II, the U.S. economy grew at a healthy and accelerated pace. But lulled by technological superiority in most disciplines and unthreatened by foreign competition, American business seemed to grow complacent—comfortable in the notion that we should forever be the dominant worldwide industrial and economic force. Capital investment for the future, many believe, came to be secondary to next quarter's earnings and the immediate year's performance. Our focus seemed to turn toward the short term profit, when the gradual but aggressive growth of industry in other countries might have dictated a longer view.

Hindsight tells us that we should have expected a loss in competitive edge, as our own productivity began to decline even as our foreign competitors' productivity increased. Total productivity growth in the United States has continued to decline—to a point where it now trails that of our most serious foreign competitors.

Ironically, many of the management techniques, and most of the technology, that have been applied and adapted so successfully by other countries (particularly Japan) originated in the United States.

The decline in productivity has been uneven. In farming, where technology (in farm machinery, irrigation systems and chemicals) has played a dominant role, there are fewer farmers today than existed in the years just following World War II, and yet our farm production exceeds that of any nation in the world. But in many other areas of industrial production, such as steel, automobiles and electronics, American technological superiority is being used by others to compete successfully against us. The need to regain our competitive edge by improving productivity is abundantly clear in industrial production.

The need is becoming increasingly acute in the white collar area as well. AIS/American Bell claims that office productivity has increased just 1% during the past five years. At the heart of this problem is communication—the very area in which we enjoy the greatest technological superiority. The white collar sector functions most intensively on information—on the ability to communicate and access accurate and timely information; to enable prompt, easy and relatively inexpensive interaction among individuals in different locations; to simplify customer order entry, fulfillment and invoicing; to extend sales reach and effectiveness. In view of our superiority in this very technology, a diminished productivity rate is alarming.

What seems to be happening is that the new technology is being misapplied. Sophisticated telephone systems, word processing, computer networks and electronic mail, memory typewriters, even faste telecopiers and communicating telecopiers are generating more—not less—paper; an can result in decreased, not greater, productivity.

An Eastman Kodak study reported that the volume of paper handled by the averag U.S. office worker is increasing at the rate of two file drawers per year, or roughly 4,000 documents. An interesting study by A.B. Dick, entitled *Frustration In The Workplace ... Its Effect on Productivity*, states, "Offices in the United States generate approximately 600 million pages of computer printouts, 234 million photocopies, and 76 million letters daily. All of this paper, about 45 new sheets of paper a day per office worker, is threatening to overwhelm us in a flood of data, not necessarily information."

Data—not information

And herein lies the first clue to understanding productivity in the office: the difference between data and information.

More data isn't more information, any more than more production is more productivity. And, it would seem, our vast tech nology is often producing more data and less information.

What's the difference?

- 556002232, as a string of numbers alone, is data; 556-00-2232, as a social security number, is information
- 2123560010, as a string of numbers alone, is data; (212) 356-0010, as a telephone number, is information
- 041183, as a string of numbers alone is data; 04/11/83, as a date, is information.

The ability to use the new technology to generate data is only half the battle. To win the productivity war we must win the other half of the battle—to turn data into effective information.

To influence productivity, information must contribute to the useful and productiv knowledge of its users—the correct end users. Productivity is not the exclusive domain of senior or even middle management. It is often gained or lost in the trenches—in the office, the plant, the conference room; on the telephone, the lathe, and the word processor. Certainly, it means

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ALTOS COMPUTER SYSTEMS

understanding, in the first instance, what information is needed and how it is to be used. Only then can one make effective decisions when called on to choose techniques and equipment for gathering, sorting and communicating data

The Growth of Technology

The technical means to communicate business information began more than 145 years ago, when Samuel F.B. Morse invented the telegraph. In 1876, business communication took a second giant stride when Alexander Graham Bell filed a patent for the electronic transmission of speech—the telephone. Technology accelerated with Marconi's invention of radio and the growth of radio broadcasting in the 1920's, followed by television in the 1940's. World War II spurred rapid development of microwave radio as a vehicle for information movement. The technical information needs of the military during the war also hastened the development of the earliest electronic computers. Cumbersome and expensive, they were a long way from being able to serve the ordinary needs of business.

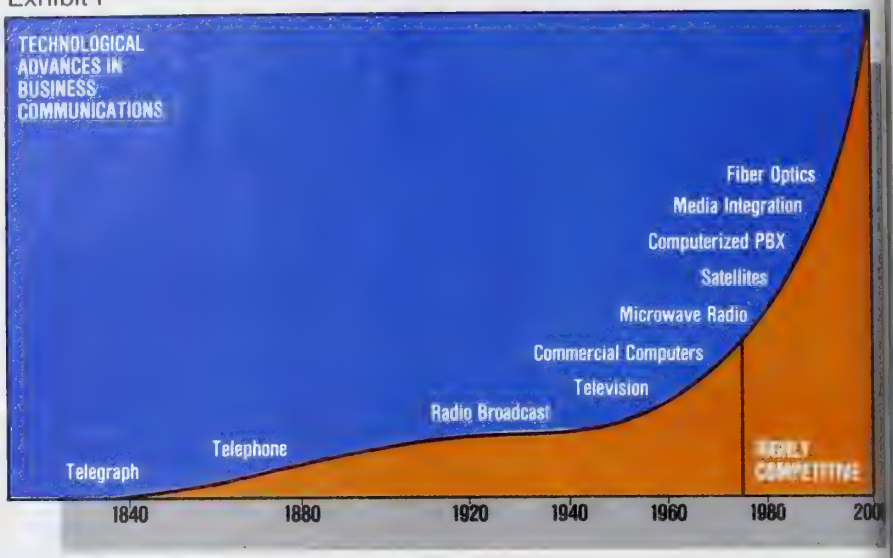
Modern technology began in the 1950's and 1960's, with the development of transistor technology. At first it was useful in improving the performance of voice communication. But then it made possible extraordinary computer capability in manageable size—and at manageable cost. First came large mainframe computers for only the largest companies; and later the microcomputer as we know it today.

The increasing use of computers, in the 1960's, with their ability to manipulate and store vast quantities of information, stimulated the need for computers to communicate with one another. Computers understand only electronic impulses, similar to those carried by the early telegraph, but the ubiquitous telephone voice circuitry offers the greatest opportunity for rapid communication. And so voice circuits had to be segregated and conditioned specifically for computer traffic, using the *modem*—the modulator/demodulator. Computers ushered in a new era of business communication in which data could be developed, manipulated, stored or transmitted with remarkable ease.

Increasingly, during the past two decades, business users have learned to use computers to communicate, using a variety of terminals and workstations. Businesses today can seek information, enter orders, request reports, and generally conduct business with an ability and speed that seems as far removed from the practices of the 1940's as from the quill pen.

Electronic Communications—An Historical Perspective

Exhibit I



In a competitive environment, high technology flourishes.

Which is not to say that this capability is, as yet, sufficiently integrated into business practice to the degree that it can improve productivity. Even with this capability, business users continue to communicate with others through separate telephone systems and voice communications circuits, often about information maintained and generated by the computer—to explain it, to challenge it and, on occasion, to stop it.

William Jacobson, Vice President of Marketing for Executone, Inc. emphasizes the need to apply the new technology to the smaller business user. "Most advanced communications capabilities start in the big systems serving big business. The major challenge of the 1980's for Executone, Inc. is to bring these capabilities to the small and medium-sized business user whose survival and success depend on productivity."

Recent Developments

The recent pace of technological advancement has been breathtaking and, today, the distinction between communications and computers is no longer even necessary. Computers, at the very core of communications networks, route and control communications on major common carriers, including AT&T, GTE, MCI, SBS, and Tymnet. Voice and computerized dat traffic can now flow through the same tel phone systems, and sometimes simultaneously. In fact, most users are unprepar to take advantage of all the sophisticated functions of which computerized telepho systems are capable.

Recent developments that have increased business communications cap bilities include satellites and fiber optics.

Satellites make it possible to move la volumes of all forms of data, without wire or cables, between stations thousands of miles apart.

Fiber optics permit the rapid transmiss of enormous amounts of information by t use of hair-thin fibers. A single glass fiber developed by Corning Glass Works, can carry 300,000 voice conversations simultaneously. AT&T already has about 37,00 miles of fiber strands in service, while MC and GTE now use fiber optics and plan extensive future use.

With the proliferation of business com munications systems and services, stronger competition has spurred technological advances (see Exhibit I). Capabilit of systems have grown exponentially. Competition should be even keener as a result of the consent decree that settled t Justice Department's anti-trust suit agains AT&T and the FCC's Computer Inquiry II directives. These two momentous agree-

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ments removed the regulatory wraps from most business communications services, especially those enhanced by computer technology.

Although AT&T may choose not to compete directly with IBM, Digital Equipment and others in manufacturing computer equipment, it is clear that the new unregulated subsidiary, AIS/American Bell, will market a variety of advanced information systems. Included will be network services, voice and data terminals, computer peripherals, intelligent telephones, and increasingly capable communications switching systems. The next few years should be filled with exciting new products from AT&T and its competitors.

Vendors, recognizing rapidly changing user needs, are crossing over into competitors' traditional markets and forming cooperative ventures. For example:

- IBM, already a part-owner of Satellite Business Systems, recently joined with MITEL of Canada to develop and market switching systems in the U.S.
- Northern Telecom Inc. and Sperry Univac are coordinating complementary product developments.
- Xerox introduced Ethernet with major support from Digital Equipment Corporation and Intel.
- American Satellite is forming a joint venture with MITEL to offer shared long distance voice, data and videoconferencing services.

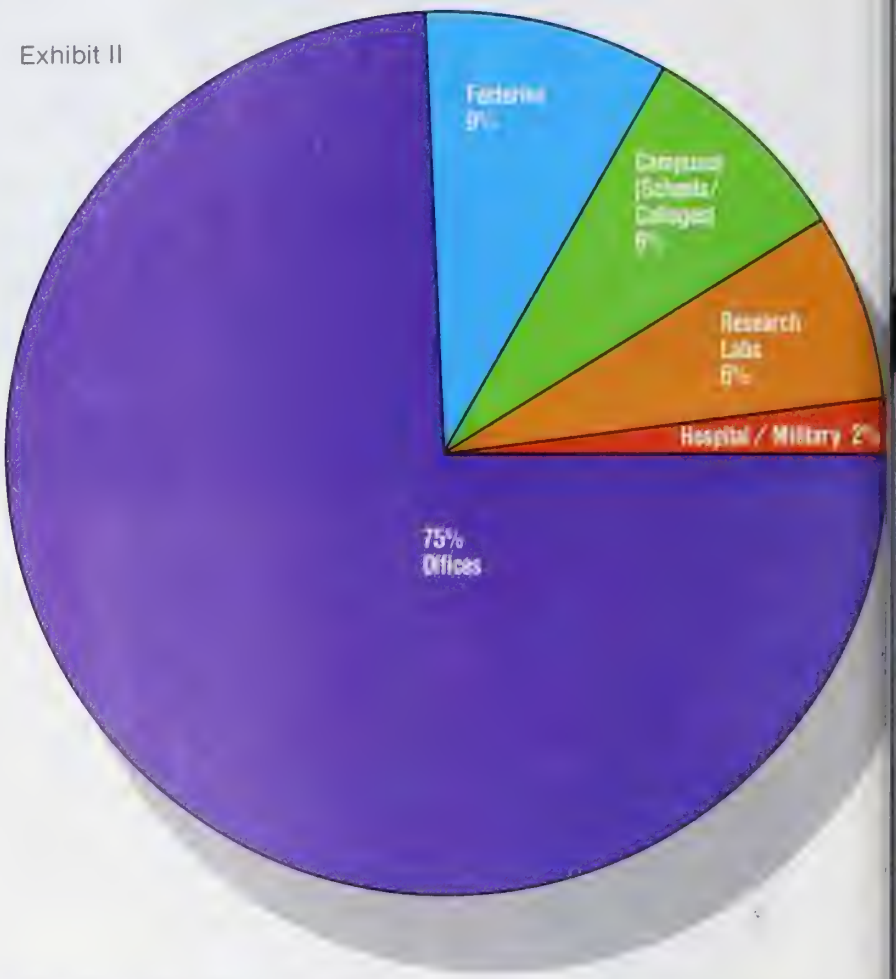
Emerging technologies, such as local area networks, videoconferencing, and shared communications services, are beginning to have more widespread impact.

Local area networks (LANS) are high-capacity communications pathways that allow a sizeable number of various business communications devices, located in a limited geographical area, to communicate with one another. They are becoming increasingly available, lower in cost, and easier to use. Currently, more than 10,000 LANS are installed, mostly in an office environment; their number is expected to reach 37,000 by 1987. This is an average compound annual growth rate of about 29% (Exhibit II).

The American Stock Exchange in New York recently completed installation of a local area network that ties trader positions to computers in a nearby building. Eventually, this LAN can accommodate telephone and video services and additional terminals and data transfers without additional cabling

Local Area Network—Use by Type of Facility

Exhibit II



Through Local Area Networks (LANS), a variety of computers and terminals can communicate with another in a limited geographical area

ARCO (Atlantic Richfield) recently completed the first phase of a private dedicated internal satellite communications network. One of its purposes is to allow interactive videoconferencing among its many domestic U.S. locations, primarily to discuss and review exploration and drilling progress.

Among insurance companies, Aetna has completed about 5,000 videoconferences since mid-1981 between two remote sites, and plans to build 13 more linked sites throughout the country. American General determined that 19% of its meetings involved personnel from headquarters and three of its companies, and built networks covering the four locations.

Public videoconferencing services
an attractive alternative to the occasion
user. Providers currently include AT&T,
Western Union, Videostar Connections,
many large hotel chains. Some of the
frequent users include Ford Motor Com
pany, Chrysler, Merrill Lynch, Continent
Corporation, IBM, Hewlett-Packard, and
Lanier Business Products. The service
been used most typically to introduce
products. Ford introduced its new sport
coupes in 1981 to more than 20,000 de
ers and salespeople in 38 cities, reachi
more dealers simultaneously than it eve
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executive time.

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The EXXON 8400 System features an advanced central controller/microprocessor. Its upgradeable storage can hold up to 235,000 pages of typed material and supports up to sixteen systems, archiving or stand-alone workstations.

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becoming increasingly available. Recently, the Port Authority of New York and New Jersey joined with Merrill Lynch to announce plans to construct a "satellite farm" on Staten Island, called Teleport. Plans are for about 15 satellite earth stations with access to some 20 satellites in orbit. Users will have access to high speed voice, data and facsimile transmission service, and videoconferencing pathway capacity. Merrill Lynch anticipates that Teleport will expand its communications capabilities by 10% to 20%, even as it trims costs.

Panasonic has coupled VCR technology to microprocessors to provide two-way communications for use in industrial training. This Interactive Video Training System promises to have a favorable impact on productivity by reducing training time and increasing comprehension.

The Need For Planning

Twenty years ago, before today's technological advances, failure to plan for and manage business communications may have been understandable. But today, in a period of low productivity growth and extraordinary international competition, it no longer makes sense to ignore the tools available to business.

The growing proliferation of sophisticated communication and data processing equipment is, by itself, not the answer. Without adequate planning to integrate business communication to meet business needs, we are again supplying data—not information.

And proliferating it is. By current count, American business and institutions now use:

- 56,000 mainframe computers
- 570,000 minicomputers
- 4,000,000 computer terminals
- 15,000 digital PBX/CBX telephone systems

The vastly increased sale of personal computers, a large percentage of them for business use, indicates that the technology is more accessible now than it has ever been, and increasingly easier for the non-technical person to use. Robert Knight, president of the Infonet Group of Computer Science Corporation, in developing his communications products has in mind the non-technicians at each level of the organization. For example, NOTICE, CSC's new electronic mail system, is designed for easy use because the end users demand it. According to Knight, "We've struggled long enough with complex systems designed by computer technicians . . . we need simplicity. I need prompting at my terminal and so do my customers; it is part of the design criteria at CSC."

Still, American business has merely scratched the surface of technology's potential, not only in sheer capacity, but in its ability to dramatically improve productivity.

The problem lies in the failure to plan—to integrate technology and communication with other productivity goals, and to focus on the real needs of the ultimate users. What are some of the reasons for this failure to plan?

Obstacles To Effective Planning

Effective communications planning must always be seen in the context of an overall business plan. "A business plan comes first," says J.E. Homet, a Coopers & Lybrand partner. "Only then should an integrated telecommunications plan, an office plan, an information system plan be put into effect."

When the telephone was the principal communications tool for business, planning consisted of little more than a decision as to how many telephones to order and where to put them. There were, after all, few communications alternatives and, without alternatives, little to plan. As recently as twenty years ago, there was no such thing as a communications manager, no matter how large the company.

But today, the alternatives are so multifarious that failure to plan communications, even for the smallest company, may be deemed unsound business practice. Yet, as most business consultants are aware, communications planning is still relatively primitive.

Looking at the problem, we perceive five significant obstacles to communications planning in today's technological environment:

- Organizational
- Priority
- Psychological barriers
- Cost justification
- Focus

Organizational problems stem from failure to assign competent personnel to address the problem and a lack of high management participation and visibility. Too often, voice and data communications, and office automation as well, are seen as separate functions reporting to different senior executives when, indeed, in today's environment, they are one. This leads to fragmented communications networks.

Moreover, top management traditior has paid little if any attention to plannin the effective use of business communi tions tools; they have turned over the jc technicians and have failed to provide conceptual guidance or priorities.

Low priority is frequently the result perception—or misperception—of com munications (i.e., computers) as a nece sary evil. Not only is the communicatior executive ranked low on the totem pole the mechanics of communication are s as merely a cost, and not as a tool for increasing productivity.

Psychological barriers affect imple mentation of a communications plan. B Moore, president of Systel Computer, In which manufactures word processing s tems, suggests that "there is a stigma attached to managers having typewriter on their desks, as well as a stigma attac to secretaries having computers on the desks." This stigma is obviously counter productive and, fortunately, promises to a short-lived phenomenon.

Cost justification—Management's tude towards the initial cost and the pot tial return on the investment is a functio perception and expectations. If manager expects word processing, for example, pay for itself by eliminating a secretary two, then the expectation is wrong. But management perceives, correctly, that processing, by producing more and bett work in considerably less time, substant increases productivity, then the ultimate benefit is in the bottom line, and the equ ment is truly cost effective.

The issue, according to Lawrence Seligman, executive vice president of Datapoint, is not just whether an employ can complete thirty-five transactions in t time it used to take to complete twenty-f Rather, it is a function of helping manage make more profitable decisions. "Datapoint," he says, "doesn't try to automate clerical tasks, but strives to provide more and better information to the decis maker." Most vendors interviewed by Coopers & Lybrand agree with this approach.

Focus is too often on generating dat and not on the effective movement of information to those who most need it. "Effective communication," says Bill Rus a partner with Coopers & Lybrand, "start by identifying the users of information, ar the need for it." There are two questions, says. "Who needs the information? How can we best deliver that information?"

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V.P. Management Information Systems
Hyatt Hotels Corporation

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When Datapoint introduced the first local area network, the ARC® system, in 1977, Hyatt was among the first to install it. Today there are approximately 5,000 ARC local area networks in use, far more than any competing system.

"One reason the ARC network has been so effective for Hyatt is because it's easy to expand," says Regan. "Hyatt has had phenomenal growth, and the ARC has kept up. When more people needed the system to do more work, we simply added to the network."

The ARC local area network can be expanded virtually without limit by simply plugging in additional Datapoint processors, printers, storage disks, and terminals. Each new processor adds power to the network so new users get the same fast response the original users were getting. Companies can closely match the power of an ARC system to their needs, expanding in small, inexpensive increments instead of buying "more computer than they need" in order to have room for growth.

What's more, Datapoint systems can be expanded or upgraded without replacing software. "We run some programs on ARC networks that were originally written for our first Datapoint computer more than ten years ago," says Regan. "That means we didn't lose any of the money we invested in programming and training. And it made the growth steps easy on our people. The changeover to the ARC network was accomplished in only two days."

No matter how far an ARC system is expanded, all the users can have access to all the data except where security precautions are installed. So even though more and more people are using more and more computers, there's never a need to duplicate files.

"At present, Hyatt operates forty-five ARC systems," Regan says. "Others are in the planning stages right now. On the operations side we use them for accounting, reservations, and group sales. At Corporate we use them for accounting and for systems development. Obviously, we depend on them heavily. They're like the meters where we check our own financial performance. They simply have to work. And they do.

"Hyatt has stayed with the ARC system because it's been cost-effective. That's the bottom line. I can recommend a certain system to a hotel, but in the end, the system has to sell itself. And keep selling itself after it's installed. Our Datapoint ARC systems have done that."

For more about Datapoint, call (800) 531-5639. In Texas, call (800) 292-5099. Telex 767300 in the U.S.; 06986622 in Canada; or 923494 in Europe (UK). Or write Datapoint Corporation, Marketing Communications T41FB, 9725 Datapoint Drive, San Antonio, Texas 78284.

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Put them on Notice.

David Jackson, president of Altos Computer Systems cites an additional obstacle to the effective use of technology: a lack of industry-wide standards. "A serious effort must be made to identify and adopt industry standards, rather than attempt to keep a proprietary handle on everything. The present situation is tantamount to what the recording industry would be like if each company selected its own RPM."

These are the obstacles to communications planning but in today's competitive environment, they can hardly be considered insurmountable. There is too much to be lost by allowing them to stand; too much to gain by looking clearly at communications planning as a key to increasing productivity.

Planning for Productivity Improvement

In a recent study, productivity gains are shown to be affected directly by capital investments, technological improvements, quality of labor, economies of real scale, and research allocation. Each can be affected by management's will and direction and none of these elements can be isolated from communications. Exhibit III illustrates, in simple terms, a conceptual linkage and the flow of a "four-tier" planning process.

The approach is integrated and sequential, in four phases. Once a company knows what it is and where it wants to go, the planning process can begin

First and crucial: management should adopt a broad perspective at the onset of the planning cycle. The strategic business plan is the keystone that should recognize productivity as a specific concern and business communications tools as valuable weapons. Then, specific productivity improvement goals can be set against the communications tools available to help achieve those goals.

Second, with this strategic platform, management then can address information resource requirements and the logical information flows of the organization. Inherent in this, of course, is a measure of awareness of business communications applications, as well as their benefits and implications. With this awareness, management is readily able to put its imprint on designs and deployment of the applications.

A key to facilitating this second step is to involve a ranking information executive in the strategic planning, both for his input and because, presumably, it will be his job to take a conceptual plan to the next level (phase) and to execute the detailed program. His overall responsibility should include data processing, office systems and telecommunications.

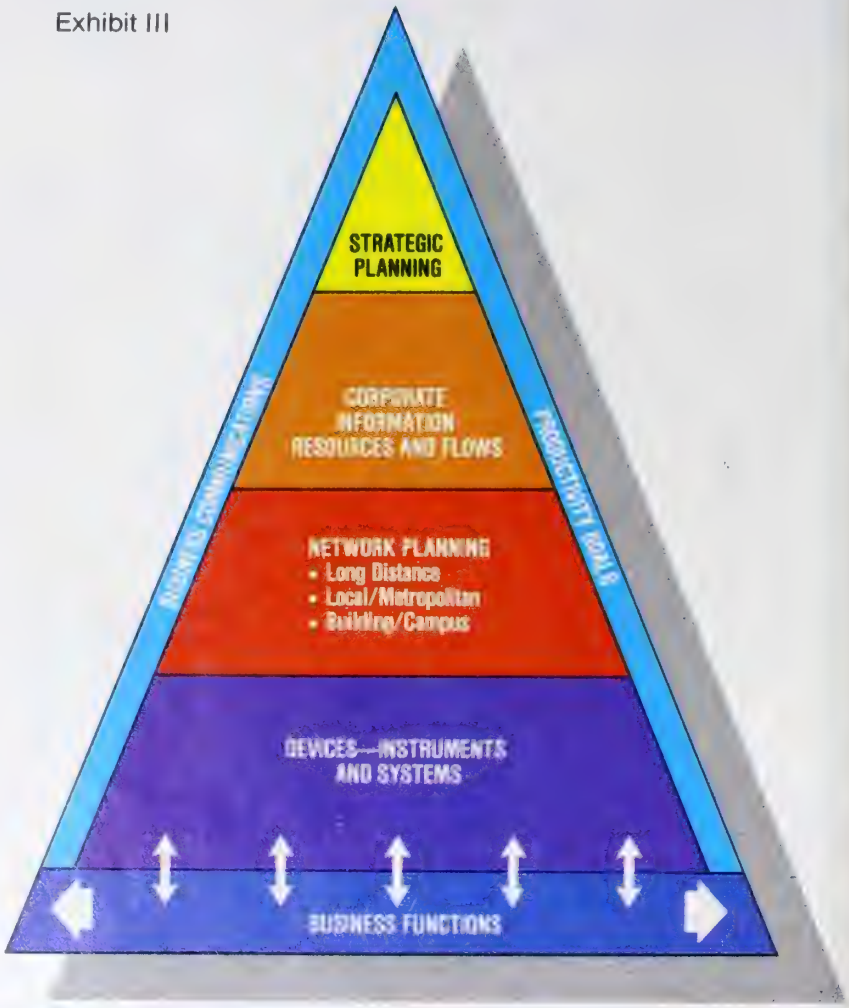
Third. Once formulated, the conceptual plan represents a charter with guideposts for technicians (telecommunications, computer and office systems experts) who must bring the plan to fruition. Set against the logical information flows in the conceptual framework, the physical network can be defined as the third tier of planning and the point at which the technicians step in. The detail planners can attack network planning in three geographic rings: long-distance, local/metro, and on-site.

The fourth and final pathway tier tak us from the site network to the devices themselves. Choices are determined by t needs of users and availability of devices meet those needs—the variety, speed, fre quency of use and deployment of hardwa (terminals, computers, data storage equip ment, printers and facsimile machines). T network options include integrated voice and data PBX telephone systems, baseband or broadband coaxial cable, and fib optic cable. They are now evaluated with the context of a larger strategic plan.

Exhibit IV defines the four-tier process in terms of planning flow and responsibilities. Management defines the strategic plan, including markets and products, organization, competition, economics—al

Four - Tier Planning

Exhibit III



Each succeeding step in the plan is made in the context of larger overall strategy.

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involving productivity. With the aid of the information specialist, this then gives form to the conceptual business communications plan, including information resources and flow, as well as benefits and practical implications. The plan is then given to the technician to develop the networks and the local systems and devices needed by the end user. But here, the technician is not working in a managerial void, as he might in many companies, but rather is designing systems within the guidelines of corporate management. The technician develops the final user-oriented communication service.

Management must then review the four-tier plan and assess its implications. What are its benefits? What will it cost? How long will it take? What, in the realm of useful business communications, can be added? Are the strategic and productivity goals appropriately addressed? What procedures are needed to monitor the plan in its implementation and performance?

While the plan is perceived in terms of the entire company, senior executives shouldn't overlook their own needs, and the value to their own productivity goals. There are some prime examples of effective senior management use of information systems and communications structures:

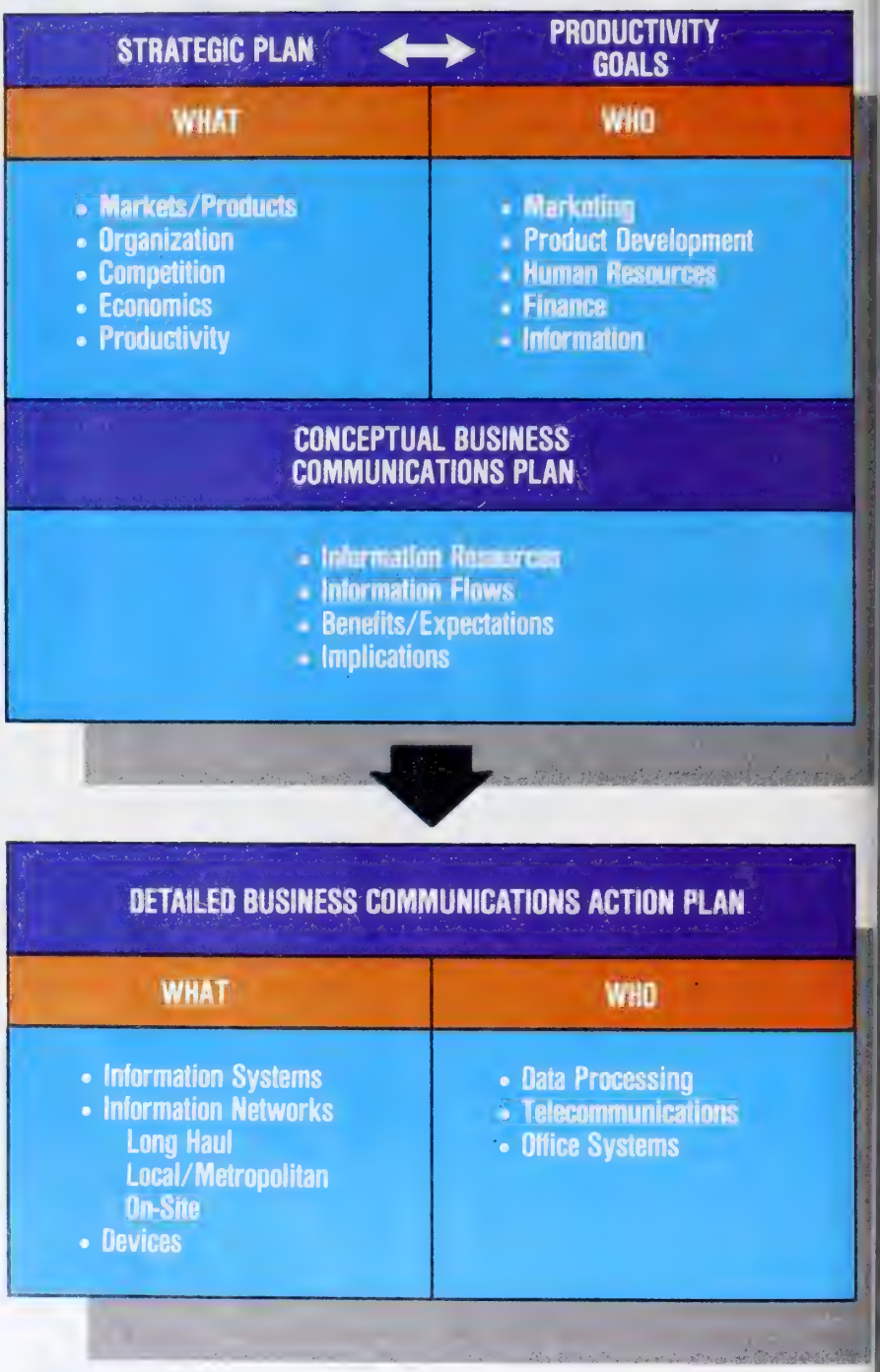
- The chief executive officer of Northwest Industries regularly retrieves reports on each of nine operating companies to help him keep control of operations, and to plan.
- The chief executive officers of Wausau Insurance Companies electronically retrieve information on their companies and competitors to help direct strategy.
- Merrill Lynch executives rely on electronic terminals and communications paths to access timely information on worldwide operations.

Integrating the System

As important as it is to consider business communications tools during planning, it is equally important to consider the ultimate productivity booster—the end users. For example, General Motors, in building a new Cadillac plant, brought labor into its planning group to assure full participation in the planning. Kepner-Trego, inc. assisted as behavioral consultants. The results in terms of productivity were astonishing. More than 60% of the plant employees learned all the jobs within their work teams, and absenteeism declined to less than half the GM aver-

Exhibit IV

Planning Process



Planning flow and responsibilities must be clearly defined.

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age. Suggestions yielded about $1.2 million in savings, and quality went off the top of the chart. Planning, it showed, must include people as well as technology—the combination of communications tools meeting informational needs in the trenches.

Resolute action is also critical. Legendary are the tales of exciting and innovative plans dashed on the rocks by poor execution, or failure to act. On the other hand, action often breeds success.

L.L. Bean, the successful mail-order company in Freeport, Maine, acted. As a younger, smaller company, L.L. Bean used standard telephone equipment and manual order files to service its customers. When growth required a move to larger facilities, L.L. Bean's management, assisted by Coopers & Lybrand, evaluated information needs, information flow, and communications as part of a corporate-wide expansion strategy. Sophisticated automatic call distributing equipment, similar to systems used for airline reservations, was installed in both customer order and customer service departments enabling Bean personnel to service customers more efficiently. The results of this system were impressive:

- Productivity in the customer order department rose approximately 10%.
- The company estimates that it can now accommodate a 20% increase in activity with the same or smaller staff.
- Customer inquiries, including off-line research and callbacks, have declined dramatically.

These gains have been realized in less than six months. The future promises to be even more dramatic.

Another successful application of business communications tools was demonstrated by Lincoln National Life Insurance Company, in Fort Wayne, Indiana. The company occupies two buildings in Fort Wayne located five miles apart, and formerly served by two different telephone systems. About a year and a half ago, senior management, in an effort to promote a single company image and to boost productivity, directed the telecommunications planners to unify communications. The planners selected a large modular telephone system, part of which would be deployed at the remote building but connected to the main part of the system with private microwave communications pathways. These high capacity pathways not only would connect the telephone system but would allow terminal users at both locations to converse.

Again, the results have been impressive.

- Communications operating costs have declined by 10% to 15%, while service to customers has improved.
- The company has increased its microwave capacity to accommodate computer terminals and high speed facsimile, and is evaluating full motion videoconferencing.
- Management is now negotiating to allow the city of Fort Wayne to share long distance circuits because Lincoln National's telephone system has the switching and routing capacity and the requisite call identification and allocation features.

These two examples represent cases in which communications planning came first. Information flow was defined and refined. Networks, local and long distance, were established and equipment was selected to meet the local individual users' needs, increasing productivity at each level.

Summary

It is more than abundantly clear that the need to improve the rate of productivity in American business is profound. International competitiveness demands it, as does the nation's current economic condition.

There are many elements that contribute to increased productivity, but, clearly, none is more crucial in today's economic context than the effective use of contemporary technology. And foremost in that technology is electronics.

To allow ourselves to be deprived of the advantages of the very technology in which we are world leaders is self-defeating.

Fortunately, foremost in that technology is the skill and capability of communicating information. Never before in history has information been more crucial to economic function. Never before has there been so great a proliferation of information.

It behooves the manager of today, then, to know intimately how to integrate information into the daily pursuit of business, so that decisions may be made wisely, quickly, productively.

Information, not data. If information is abundant, then data is inundating. This is why, if increased productivity is to be achieved, the distinction must be made between information and data, and the data must be managed in a planning process that makes it useful. And this is why information communication planning must be a senior management function.

Without the intelligent and useful flov information, there can be no productivity improvement. Without productivity improvement, we can indeed be buried our competitors, both foreign and dome And buried even as the means to our sa vation is in our very grasp.

About Coopers & Lybrand

Coopers & Lybrand is a leading interna tional public accounting and manageme consulting firm, employing more than 29,000 people in 98 countries. It serves clients of all sizes, involved in all industri and has one of the largest consulting pr tices in the United States. Its more than U.S. consultants provide services in mar agement information systems, telecomm ications, business and organizational pla ning, operations improvement, materials control, and financial analysis.

About Jud Breslin

Jud Breslin of Coopers & Lybrand is a le ing spokesman for distributed informatio processing and has participated in semi ars and forums sponsored by DPMA, the Wharton School, the Diebold Group and AMA. Mr. Breslin is coauthor of one of th pioneer books on the subject, ***Distribute Processing Systems***, published by AMACOM and featured in McGraw-Hill's Computer Book Club. He has over 15 ye experience as consultant in planning an information systems. Prior to joining Coop & Lybrand, he acted as Deputy Assistan Administrator for Policy and Planning, un William Simon, in the original Federal Ene Administration. He has an MBA degree from the Wharton School and a BA degr from Colgate University.

About Dennis Conroy

Dennis Conroy of Coopers & Lybrand's Management Consulting Division special izes in telecommunications consulting. H has about 12 years experience in the tele communications industry including more than 5 years in management consulting and 7 years in marketing positions with M Communications and the Bell System. He has spoken publicly on business commu ications, office automation and productivi to a variety of forums including Human Resources Planning Society, Southeast Actuaries Club, Massachusetts Bankers Association, Japan Management Associa tion, Administrative Management Society, and the Southeastern Telecommunicatior Association.

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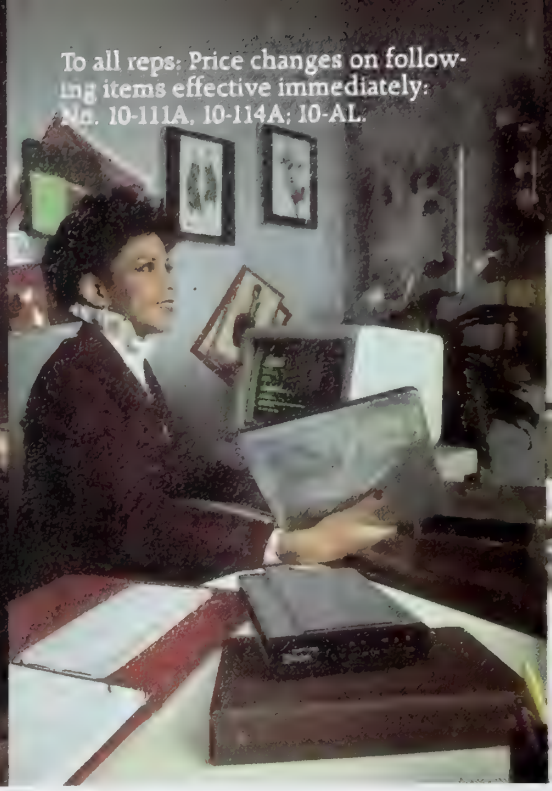

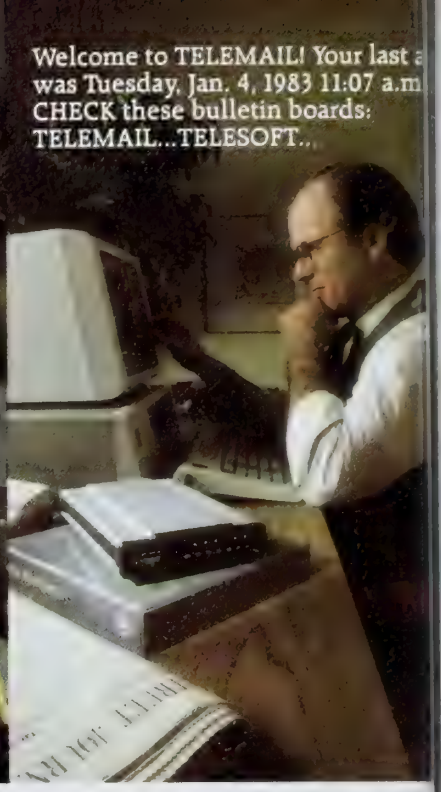

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Roy Rogers likes Thousand Trails a lot. So do its customers. But cash has always posed a problem for the campground marketer.

Flying high on debt

Thousand Trails' Jim Jensen and Milt Kuolt
"Whole brain" communications; whole lot of debt.

By Robert McGough

OVER THE PAST TWO YEARS, shares in Thousand Trails, the Seattle marketer of campground memberships, have perked up, from 3 to 20¼. Maybe former chairman Milt Kuolt, 55, really did identify the company's big problem and solve it. "You've got to pull yourself away and say, now what's wrong with the"—and here we paraphrase—"fouling company?" Kuolt says of a decision he made in 1981, "Well, the goddamn chairman, he's fouling it up." So Kuolt gave up his chairmanship in favor of big, beefy Jim Jensen, 42. Jensen describes himself as a "new age" manager with a positive outlook on things. Within each of us, he asserts, reside "total love, total beauty, total truth, total wisdom, total intelligence, total knowledge."

More to the point, Thousand Trails has found itself lenders in whom resides total understanding. That's important to a company that hocks a big chunk of its receivables to stay in business to create more receivables to hock. Thousand Trails' lifetime campground memberships cost an average of $6,000 each. The middle-income campers who buy the memberships on average pay only 40% down, but Thousand Trails' marketing expenses alone run about 45% of sales. Therefore, more cash flows out than flows in, except for the cash that Thousand Trails has raised from equity investors and from lenders.

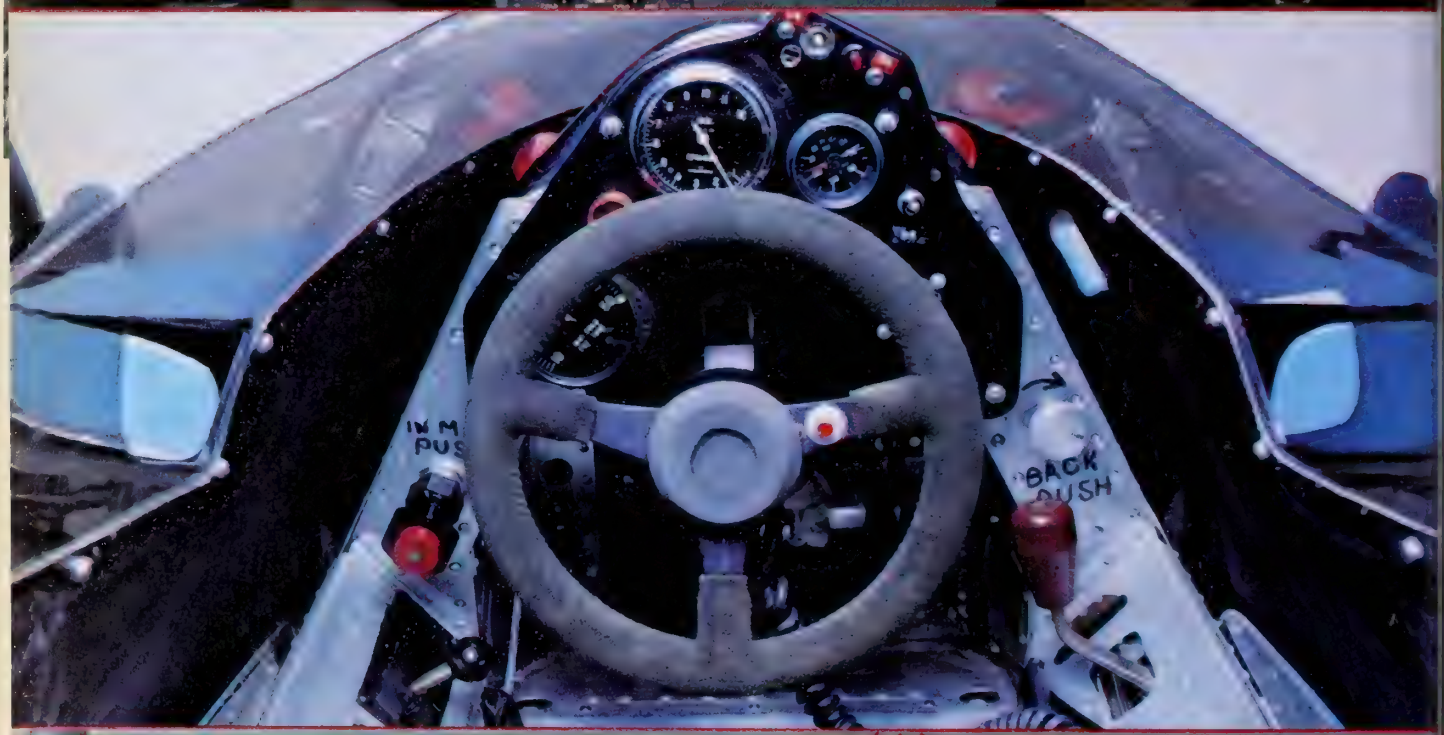
Someday, of course, that is supposed to change, and Thousand Trails will reap the benefit of leverage. More cash may actually come from customers rather than investors and creditors, and that is what the securities analysts and others who have bulled the stock expect to happen.

Right now it's clear that Thousand Trails does have something going for it. The typical campground offers beauty and comfort on 200 acres, two-thirds left in a pristine state, the rest developed with tree-screened recreational vehicle sites, many of which have electrical and sewer hookups. A clubhouse sells provisions and sponsors artsy-craftsy activities for members, 43% of whom are retired. They make their neighborly rounds in pantsuits and flowered shirts. They are grandparents, former grain-elevator operators, pipefitters or office supervisors. They talk about their sense of security in the knowledge that the campground employs a 24-hour guard. In a Thousand Trails sales office, a wall displays a framed collage of headlines blaring news of other campgrounds that are "crawling with squatters, criminals."

But Thousand Trails members keep remote from the untidy. At heart, the business is a play on the aging of Middle America, its need to occupy stretches of time and space safely, and its shrinking options to do so inexpensively. The 40% of a $6,000 membership, after all, is only a fraction of the cost of a long vacation in Hawaii, but it buys camping serenity for a lifetime.

Milt Kuolt had all that in mind 11 years ago when, with a little help from his friends, he created the first Thousand Trails campground in Chehalis, Wash., a 90-minute drive from Seattle.

Kuolt is the son of missionaries to India, and he reveals his puritanism in barracks-room verbiage. The ethics of his own salespeople, for example, once greatly concerned him. Here's how he puts it: "Salesmen will typically tell you whatever the Christ they've got to tell you to sell their goddamn product." He has fired salesmen who gilded the lily. He brought in a new manager, who turned the all-important accounts receivable department from a hard-nosed boiler-room collection agency into a professional operation staffed by mild-mannered youngsters who rely on honey to catch flies. Delinquencies on membership installment payments and the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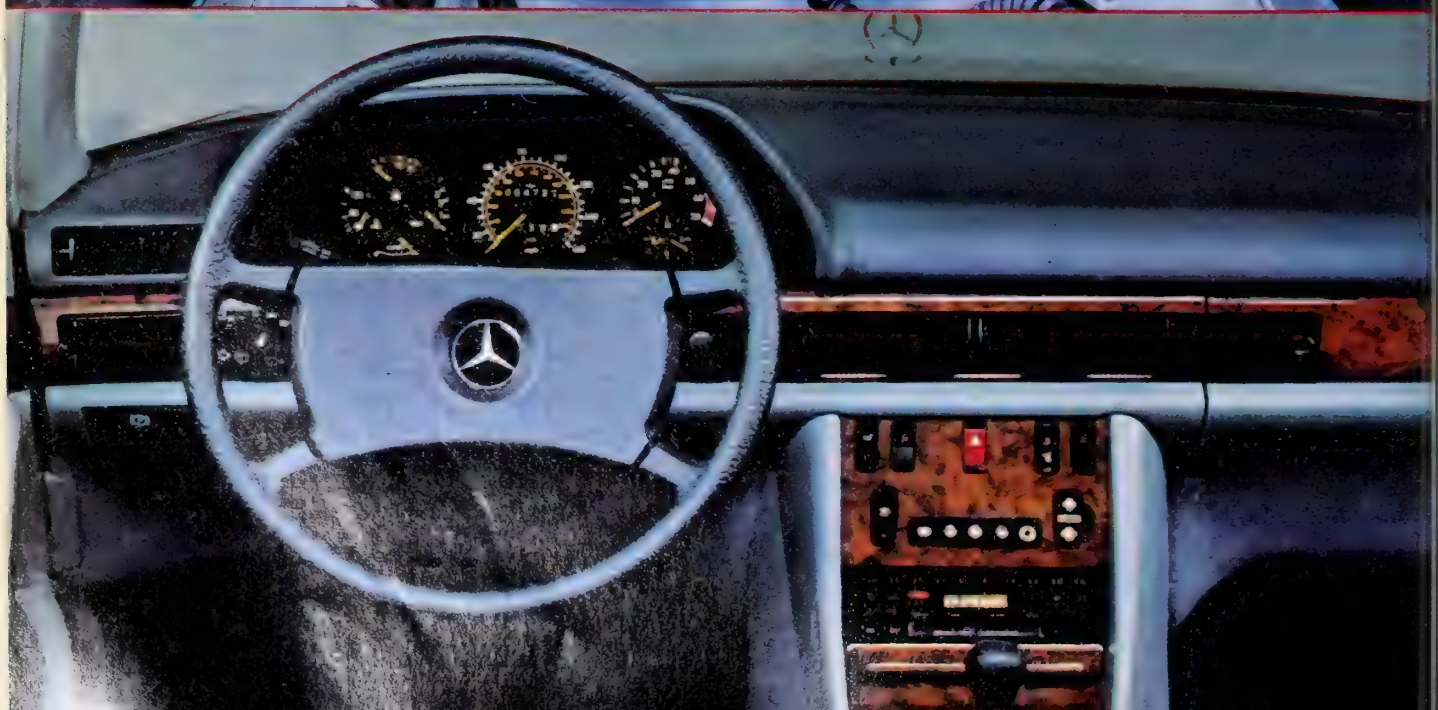

What every Mercedes-Benz has in common with a 550 mph aircraft and a 200 mph racing car.

Business jet, Indianapolis winner, Mercedes-Benz: none of the cockpits at left even vaguely resembles a living room or a lounge. Each is conceived as a moving workplace where split-second efficiency counts.

Split seconds indeed: today's automobile driver guides a ton or more of complex machinery at upwards of 80 feet per second through an unpredictable world. He can ill afford confusion. Function must come first.

In the moving workplace that is a Mercedes-Benz cockpit, ergonomic science and not styling rules. Function does come first.

86% unobstructed view

The Mercedes-Benz driver need not duck around a styling theme to see the road. Even Mercedes-Benz sedans provide 86 percent unobstructed visibility.

The speedometer and other vital gauges are centered in the driver's line of vision for almost instantaneous checking.

Note that the aircraft, the racing car and the Mercedes-Benz at left all display white-on-black *analog* gauges. Less novel than digital gadgetry–but quicker mental processing of speed and other ever-changing data.

◄ *Top: cockpit of Falcon 50 jet. Middle: cockpit of Wildcat race car, winner of the Indianapolis '500'. Bottom: cockpit of the Mercedes-Benz 380 SEL Sedan.*

A matter of milliseconds saved, perhaps. But milliseconds can sometimes be everything.

The Mercedes-Benz driver's eye is not only served but soothed. Chrome and glitter are banished from the driver's forward field of vision. Upper instrument cluster surfaces are nonreflective matte black. A unique *reverse*-angled transparent panel shields the view of the gauges from the dazzle of the outside world.

Driving by sense of touch

A Mercedes-Benz does not imitate the look of an aircraft cockpit, but duplicates the *ergonomic intelligence* of an aircraft cockpit.

Thus, without shifting his body an inch, even the belted-in Mercedes-Benz driver can instantly activate all controls by using only the *sense of touch* in his fingers. Keeping both his eyes and his mind on the road, day and night.

He can even "feel" his way through each gear position in the automatic transmission's ingeniously notched shift gate; no distracting glances down to double check.

Begrudging every unnecessary roll of the wrist, the designers placed each manual control where it can be reached by a direct and natural motion; no precious seconds wasted in fumbling about.

And no random placement. The headlight switch, for example, is placed where only the driver can work it–because he is the only person who should.

Controls in a Mercedes-Benz are as few and as simple as possible. One such control combines *nine* functions–all actuated by the driver without having to move his left hand more than two inches from the steering wheel.

Controls snap on or off with a decisive single click. No guessing games.

Not a sofa

Each Mercedes-Benz seat is a biomechanical support system that in no way resembles your favorite sofa. It is single-mindedly devised to help offset the strains of physical confinement unique to prolonged car travel.

The driver cannot get up and walk around–so his seat must help him stay refreshed during long hours at the wheel. Thus, a Mercedes-Benz seat is *firmly* sprung and padded–allowing the body to constantly and subtly shift position. Keeping circulation unhindered. Helping retard drowsiness and fatigue.

In seating, as in all other particulars, the engineers of Mercedes-Benz refuse to put you in the lap of luxury. They put you someplace better: in the hands of science, where they believe that anyone moving at upwards of 80 feet per second belongs.

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Engineered like no other car in the world

$200 in annual dues have shrunk to less than 2% of outstanding balances from 14% in 1979.

But cash has always posed a problem. In 1976 Kuolt had a chance to buy 199 acres of defaulted property from its mortgage-holder, a banker who offered Thousand Trails a $2.5 million credit line if the company would agree to pay $1 million for the land. Kuolt felt it was worth only half that, but he bought it at the asking price. "He raped us," Kuolt says of the banker, "but my closest advisers pulled me right out of this room and said, 'Kuolt, we don't give a damn if you push the whole goddamn piece of land into Puget Sound. You sign that goddamn deal with this banker. You need the cash.' "

Three years later, to raise fresh cash, Thousand Trails went public. At the time, its current liabilities exceeded current assets by more than $2 million. "This offering involves a high degree of risk," the prospectus routinely conceded. Kuolt puts it another way: "We were technically bankrupt."

Through the sale of debentures and 300,000 shares of stock, Thousand Trails raised $5.7 million. The very next year, marketing expenses soon bled it off. Also in 1980, the company found another source of cash, in First National Bank of Boston. "We knew somebody who knew somebody," says Mel Kays, Thousand Trails' chief financial officer.

The bank gave Thousand Trails a $10 million line of credit at 2 points over prime. Since then the company has gotten credit from other banks, so that its commercial credit lines have risen to a total of $25 million.

But even that hasn't been enough. By 1981 Kuolt had decided that the blame, especially for rising costs, lay within himself. That's when he hired Jensen, who for six years had worked as president and chief operating officer of Grantree Furniture Rental, main subsidiary of Grantree Corp. in Portland, Ore. Jensen expanded the number of campgrounds to 21 from 14. Six new ones are expected to open in 1983. He restructured sales compensation to create bigger incentives and installed a video network to provide employees what he calls "whole brain" communications.

Prospective customers also get video spiels, including a testimonial from Roy Rogers, who holds options on Thousand Trails stock. (You can't buy Roy for cash.) Roy allows as how he wouldn't recommend a single place to camp other than Thousand Trails. He then exits electronically, and the tape screens a tough-looking biker gunning through a public park, and a long-haired type swilling beer.

Last year, under Jensen, Thousand Trails earned $7.8 million, or $1.45 a share, on sales of $56 million. This was up from earnings of $3.3 million, or 71 cents a share, on 1981 sales of $40 million. But to raise cash, the company had to borrow $8.6 million.

Jensen had decided against a second public offering in 1981 because the stock was trading at less than the 12 Jensen thought it should bring. The selling pressure came from Kuolt, who was offering blocks here and there to finance his own sideline business, Horizon Air. In 1982 Thousand Trails did privately place treasury stock with Western Savings, a state-regulated Phoenix thrift, at a price of 10 for 370,000 shares. Including other purchases, Western Savings acquired a 24% stake. Just as important, it has provided a $25 million line of credit at 4 points over the six-month Treasury bill rate, or roughly 1 point over prime. The Western credit line is dedicated to property acquisition and development, the commercial bank line to working capital.

Jensen thinks that within two years Thousand Trails' ever-swelling receivables will generate enough in repayments to start working down the company's debt. Yet Thousand Trails commands no influence on the economy as a whole, which determines whether new members will pay, say, 40% of their membership price upfront, or only 10%. The company has little control over the interest rates it pays. And some people do drop out—754 did so in 1982, vs. 10,124 new members.

Meanwhile, Thousand Trails has obliged itself to provide camping privileges and services to good-standing members for years to come. Until cash flow becomes positive, Thousand Trails will have to meet its obligations and finance its aggressive expansion by borrowing against receivables. It may all work out wonderfully well. If not, shareholders will take a beating. ■

The Up & Comers

As the housing market sank, Toll Brothers sold single-family homes like hotcakes. Can they do the same with condos?

What housing depression?

By Carol E. Curtis

TAKE A HELICOPTER ride over the north Philadelphia suburbs these days and you will be struck by the explosion in home construction. But look closely. Most of the tract developments have only one or two houses on them. The rest of the land is just dirt.

Suburban Philadelphia has been hard hit by the depression in housing. Half of the area's builders went out of business during the past two years. Although housing starts are up now, most remaining builders are wary—waiting to be convinced that the recovery has taken firm hold.

Most, but not all. "This has been our greatest boom period ever," exclaims Bruce Toll, 39, as he shows a visitor his "chart room"—a conference area covered with maps of Toll Brothers housing developments, all of them selling well.

Toll Brothers, a privately owned partnership of Bruce and his brother Bob, 42, hit sales of $43 million last year, up from $19 million the year before, during housing's biggest decline in four decades.

Not by accident have the Toll brothers prospered. Though this is tiny, obscure Horsham, Penna., you

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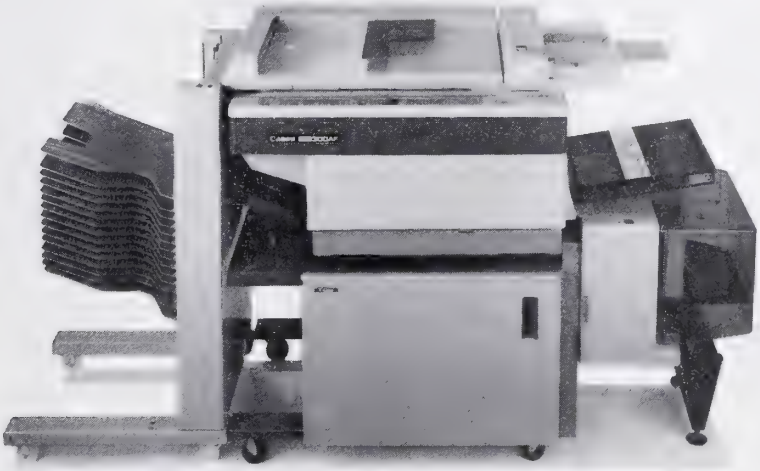

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may well be persuaded that it's the only place you will ever want to buy a home, and that the rigorous one-hour commute to Princeton or Philadelphia is worth it.

Bruce and Bob Toll seem an unlikely pair to make it big in housing in heavily Catholic southeastern Pennsylvania. When Bruce got out of the University of Miami with an accounting degree in 1965, he still had his bar mitzvah money, given him at 13. Bob, a lawyer, was unhappy at his Philadelphia law firm. The two used Bruce's nest egg to purchase two lots. Then they got a bank loan to build two "developer's colonials" and agreed to pay back the bank with the proceeds of the house sales.

Instead, they used the homes as models and took back to the bank, as collateral for fresh loans, contracts to build houses for customers. The bank bought the deal, and the brothers were off and running. Their business since has remained essentially unchanged: building presold, single-family, detached homes on cheap land to undersell the competition.

At first, their four-bedroom colonials sold for $17,490. They made less than 3% profit per home, 5% below the standard builder's profit margin. They took the cut so that the houses would sell fast, thus minimizing carrying costs. It worked like a charm. In their first year, 1967, the brothers sold over 30 homes.

Then, during the 1968-69 housing downturn, the brothers experienced their only real slump. Money was tight, so they went hat in hand to the Federal Housing Administration. "The bureaucracy there was so difficult that even the soles of your feet had to be approved," Bruce cracks. "That was the last time we went to the FHA."

During those down years the brothers meticulously analyzed competitive developments to determine costs and construction details, the dollars-and-cents value of quality schools and a homebuyer's closing and borrowing costs. Then, on Toll homes, the brothers offered a better deal. To fatten their margin from 3% to 5%, they paid all bills every two weeks. This allowed the brothers to purchase materials more cheaply and pay subcontractors less. "The result," says Bruce, "is that we sell the exact same house that anyone else can build, but for less."

The Tolls also know a thing or two about salesmanship. Their homes are not Levitt-type shelter. "It's not Gucci, but it isn't K mart, either," says Bob. Their standard, four-bedroom models get finished with the best that money can buy: Typically, $70,000 is spent on furnishing each model. All the amenities—the fresh-baked pastries in the kitchen, the fire in the fireplace, the piped-in music—make a soft sell.

The warm hearth explains why, unlike most builders, the Toll brothers sell more homes in winter than any other season. During last February's severe snowstorm, for example, they sold 16 homes, despite 2 feet of snow on the ground.

The Toll brothers also can offer 13 different mortgage plans at below-market rates. Three years ago the brothers guessed that interest rates would soon be soaring, and the company bought "pockets full" of mortgage money "from savings and loans—anybody who had it." Last year, when rates on 30-year, fixed-rate mortgages climbed as high as 17%, the brothers were still offering borrowers mortgage money at a substantially lower rate of 13¾%.

It still takes selling to sell a house. When the prospect has settled by the fire, petits fours in hand, the soft sell turns hard. A salesman trots out the smorgasbord of mortgage plans, and pushes for a deposit on the spot. "A cardinal rule," says Bruce, "is not to let the customer cool off."

If a prospect obviously can't afford the home he is looking at, chances are Toll Brothers salesmen have something he can qualify for. Toll homes range from $250,000 down to $60,000 for a bare-bones colonial on a tenth-of-an-acre lot.

Bruce and Bob Toll in their Horsham, Penna. chart room

"We sell the exact same house that anyone else can build, but for less."

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More than one-third of customers are corporate transferees. The brothers have personally visited large companies in the Princeton and Philadelphia areas, dropping off Toll Brothers literature and encouraging corporate relocators to refer new arrivals to Toll Brothers developments. They have thus been able to skim the cream off the area's home buyers.

Since those first two colonials went up, the brothers have built 3,000 homes. There are now 13 separate developments. Next year the brothers expect it to be 19 or 20.

Will the strategy that has worked so well in down markets hold up through the current recovery? This year, Bob says, the company expects sales to total $65 million, an increase of over 50%. But that is predicated on the success of a new strategy. Toll Brothers is no longer wedded to the single-family detached home. Last year the company opened up Rose Hollow, its first condominium project, in Bucks County. The brothers have also recently purchased an abandoned veterans' hospital in Philadelphia's decaying center city, with plans to convert it into condominiums.

That is in the face of predictions that condos will continue to meet with hard times. "First-time buyers still want single-family detached homes," says Michael Sumichrast, senior vice president of the National Association of Home Builders. "The disenchantment with condos has finally set in. They will be around in the future but will be difficult to sell."

Selling those condos will become doubly important if the brothers take their company public, a decision Bob says they are weighing.

Not to worry, Bruce adds: "We are in the merchandising business. When the other guy doesn't sell it, we can." Sitting by that cozy fire, listening to the strains of piped-in violins, one is in no mood to argue. ■

The Up & Comers

General Housewares nearly went bust in the 1973-74 recession. But it had a record year in the 1982 slump. Why the reversal?

Lessons well learned

By Laura Rohmann

THE HOUSEWARES company that Jack Muller built wasn't much more than a house of cards when the 1973-74 recession almost nudged it into oblivion. General Housewares Corp. trembled under a bundle of high-cost debt and an inventory of such consumer yawn-inducers as kitchen stools and novelty candles. Profits went poof. From a total of $3.8 million, on sales of $56 million in 1972, earnings dissipated to a loss of $1.9 million in 1973 and $7 million in 1974.

"I didn't see the credit crunch and inflation coming. The result was that I got caught with a lot of debt and businesses that weren't capable of carrying the load," says GHC Chairman Muller. "We feel very lucky to be here today."

Muller and General Housewares actually learned from experience. GHC, in Stamford, Conn., has emerged from the recent recession in a much different style. The year 1982 brought GHC record sales of $74.3 million, a 10% increase in income, to a record $3.7 million, and a long-term debt trimmed to a manageable 56% of equity. Coming out of the recession, GHC will perform even better. How did it all happen? What did Muller do right, this time around?

It all started with what he did wrong. Back in 1966, Muller, then 43, a Harvard M.B.A. and former Macy's management trainee, was working at General Foods as a marketing executive. But he wanted to start a business of his own. The Laird group, a syndicate of venture capitalists owned by some of the du Pont clan, came up with the money. And Muller set out to find some companies to buy.

"We talked about a number of categories," says Muller, "and for one reason or another we couldn't make anything work. So I got desperate and one day drove to New York, went to Macy's, went to the top floor and said, 'I'll find a business here.' I went all the way to the bottom, and as I came down the escalator and saw the housewares area, I said to myself, 'Well, this has got to be it.' "

General Housewares Chairman Jack Muller
Designer candles and $130 pots.

In 1967 the Laird group raised $1 million in equity and borrowed another $5 million. Muller bought J.R. Clark, a struggling Minnesota producer of outdoor furniture, ladders and ironing boards with $8 million in sales. It didn't take Muller long to learn the shortcomings of his acquisition. In that age of polyester, housewives spurned ironing. Ironing boards and ladders, too, "represent drudgery or

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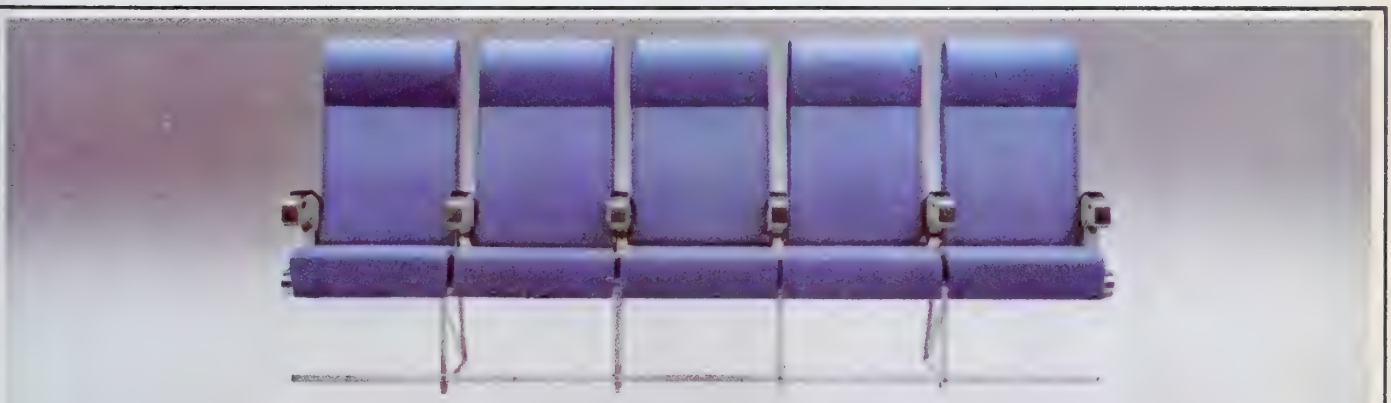

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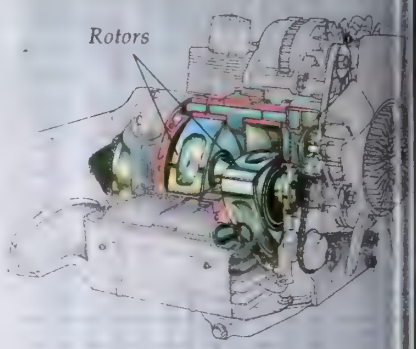

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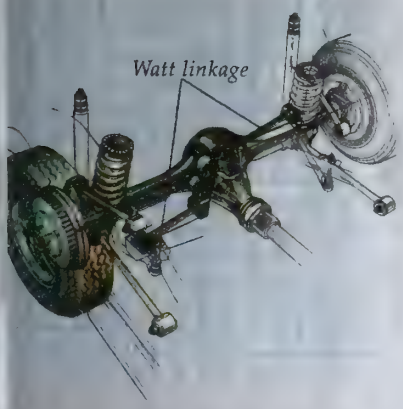

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work versus fun," Muller says.

So Muller decided on a product line that he thought people would enjoy buying: enamel cookware. In 1968 GHC bought a manufacturer and the next year acquired an importer of kitchen ceramics, forming the base of GHC's existing cookware and tabletop giftware businesses.

But Muller concedes he kept making mistakes. He diversified into losers such as outdoor grills, a seasonal product that is costly to inventory when interest rates are high. Suffice it to say that GHC's revenue and income had their ups and downs during those early years, and when the recession rolled in, GHC wasn't in the best condition to weather the storm.

It was, says Keith Hartley, Drexel Burnham Lambert corporate finance managing director, "a case of a weak balance sheet plus weak business." By 1974 GHC's liabilities had outstripped its assets. Parts of the company, such as its steel kitchen furniture business, were dropped for cash.

Despite the heat, GHC stayed in the kitchen. But by 1975 only a few parts of its original cookware, giftware and furniture businesses were left in its name.

Although between 1974 and 1977 Muller was able to bring long-term debt down to 50% of capitalization and turn 1974's $7 million loss into 1977's $4.8 million net before taxes, each step forward seemed to bring a half-step backward.

Then, in 1980, GHC got a break. The International Trade Commission ordered temporary tariff protection—ending next year—for domestic producers of porcelain-on-steel cookware. After a decade of sizzling competition from poorer countries with duty preference, GHC was the only domestic producer of the enamelware left to reap the benefits.

Muller decided it was time to go on the offensive. GHC had a two-part plan. The first part involved cost-cutting. With the goal of a 2% reduction in total costs a year, GHC began putting 50% of its capital spending into more efficient production. The second part of the plan put GHC into more luxury products with higher profit margins. "Class is mass," Muller says.

Magnalite Professional cast aluminum and magnesium skillets and bakeware were introduced in 1979. GHC spent $350,000 on the electrolytic bath, which gives the pans a satiny gray "professional" look. Retailing for up to $130 a pot, Magnalite Professional sales have grown by 50% each year for the past two years.

Next, Chateau enamel pots with a supposedly European-looking bulge bottom were introduced in 1980, and a more decorative Chateau Plus line was introduced this year.

GHC is also banking this year on its new designer-licensed cookware and giftware lines. Current designer lines include the Gear country motif collection, an enamelware line to match Pfaltzgraff stoneware and a variety of authentic folk patterns licensed from the Museum of American Folk Art. An English country line of giftware called Mary Quant will be introduced this spring.

Candles, by far the largest segment of GHC's giftware division, glow brightly. GHC's Colonial Candle of Cape Cod controls about 20% of the retail candle market, operates with low-cost summer labor and almost "runs itself," says Merrill Lynch analyst Jerry Levine. A candle business add-on, ceramic candle lamps, became 1982's largest-selling new product. Still, Muller is trying to enhance GHC's candle business by giving the candles a designer image. The 4-C emblem affixed to each Colonial Candle is intended to become the "alligator of candles."

Wall Street seems to think the time is right for such stuff. Since GHC was listed on the New York Stock Exchange last June, the stock has more than doubled, to 21 from 8.

The stock pickers may be right. GHC enjoyed a 17% increase in sales in 1981, a 30% increase in income and a 26% return on equity. Once the recession ends, Levine expects earnings growth will average 18%. Demographic figures show better than 30% increases in young households and a similar increase in disposable income for the 1980s, both trends that GHC's designer lines are meant to play off. And GHC will get a quick shot in the arm from any marketplace recovery. Since inventory has been reduced by 14%, Muller says, "If something happens at the counter at Bloomingdale's, it will happen for us, too."

And Muller is ready to make another acquisition. He's promising to pick an industry leader in a housewares field close to home. GHC has an irresistible option to purchase Textol, a manufacturer of table linens that currently provides 20% of GHC's giftware sales. Yet the burden of the past weighs heavily. "GHC has yet to make a good acquisition," Levine observes.

But at least the heat is off. Not that Muller plans to get out of the kitchen even when he retires. He plans to spend a lot of time at a new hobby—cooking. With GHC pots, of course.

Are there mice?

Robert Grodinsky has invented a better mousetrap. But are there any mice to catch?

Grodinsky, 58, is president and founder of RG Dynamics Inc., a Lincolnwood, Ill. electronics firm with only $1 million a year in sales of high-quality stereo equipment such as preamplifiers and amplifiers. Now Grodinsky has come up with a way to get finer sound from a television set.

To oversimplify, his Videosonic Stereo Phasor (VC-1) connects a television set to a stereo system, filters out the electronic noise from the television soundtrack and divides the soundtrack's monaural sound into three parts. The highs and lows come from one speaker, the mids another. You can boost the highs and select which speaker gets the lows.

"It does everything it promises," says Richard Gray Costello, a professor of electrical engineering at Cooper Union in New York, who examined the VC-1 for Forbes. Still, does anyone care?

Conventional stereo retailers don't. "The quality stereo stores have a negative interest in anything to do with television," says Grodinsky, who has designed stereo components for 30 years. "They don't have any interest in television."

RG Dynamics President Robert Grodinsky
Looking for mice.

He fared no better with department

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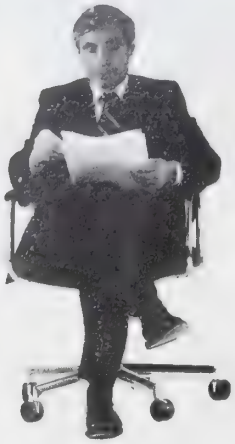

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stores. To work, the VC-1 must be near a television and stereo at the same time. Because stereo and TV sets are kept separate, there is no convenient way to demonstrate the product. Because the VC-1 sells for $159, you need demonstrations to sell the product.

But there is a more basic marketing problem: Will anyone be willing to pay $159 merely to get better sound from a television?

Realistically, Grodinsky concedes, most people don't care whether they can hear every last detail of the never-ending car crashes on *The Dukes of Hazzard.*

"It's very probable that less than 5% of them do care," Grodinsky says. "On the other hand, I doubt that 5% is an excessive figure, and 5% of 100 million homes is still a substantial number of people."

***Realistically, Grodinsky concedes, most people don't care whether they can hear every last detail of the never-ending car crashes on* The Dukes of Hazzard.**

To reach them, Grodinsky is taking ads in stereo magazines. That raises yet another question: Will true sound buffs buy the VC-1? The preliminary indication is no.

"It's a neat gimmick, but you don't get the true stereo sound," says a New Jersey audiophile who has one room of his home filled with stereo gear. "I wouldn't pay $159 for it." And, as Richard Costello points out, you need not spend $159. "If you go to an electronics store, for about $15 you can get the necessary hardware to hook your TV to your stereo to create a similar effect. Of course, you have to know what you are doing or you can get a nasty shock."

Grodinsky is willing to forego the audiophile market and the electronically handy. But, he says, "People are investing in big-screen televisions. They are buying or renting *Star Wars* for their VCRs, and they want the movie experience of the huge sound tracks in their homes. These people are our market."

Grodinsky has sold about 2,000 units. He is stepping up advertising. He will find out whether there is a market or if he has merely invented a dandy solution for no existing problem.—**Paul B. Brown**

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Lots of companies claim that business will be better next year. But utilities are allowed to show that increase now.

Once and future income

By Ellyn Spragins

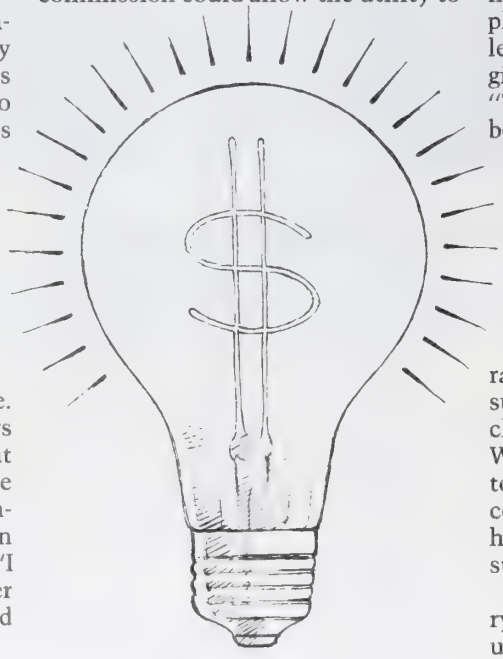
ACCOUNTANTS FACE SOME of their knottiest problems in the area of income recognition. Naturally, companies want to show profits as soon as they can. Conservative accountants, on the other hand, usually want to wait.

This conflict has an Alice in Wonderland air when it comes to utility accounting. Historically, regulators have had a way of allowing utilities to show future income before there's cash in hand. At the same time, utilities could put off their expenses. The justification for this leniency is that for many years these companies have been guaranteed increased revenues that protected them from much economic uncertainty.

There's a more pragmatic side to such nice-guy accounting, of course. It is in the best interest of regulators for utilities to show solid profits. That way, the public perception will be that utilities don't need rate increases. You've heard it a million times over the backyard fence: "I don't know why So-and-so Power needs a rate increase. It just reported record profits."

Last December the Financial Accounting Standards Board, in a decision disputed by three of its seven members, formalized this regulatory accounting. Utilities, the board decided, do know what their futures will be and should be able to report financial results accordingly. "It's kind of hard to imagine that the rules could get much softer," says Roland Ley, national public utilities specialist for Arthur Young.

An example of what's involved comes from Rich Hildahl, chairman of Ernst & Whinney's public utilities committee. "Suppose a utility abandons a power generating facility," he says. "A manufacturing company would have to write this kind of thing off immediately. But a regulating commission could allow the utility to



write it off over a five-year period on the assurance that it will adjust rates so that the utility can recover the cost." Presto. The utility now has one-fifth the expense the manufacturing company would have had.

This assurance of free-flowing future revenues works nicely on the income side as well. One of the issues that prompted FASB's rule is a method of accounting called Construction Work In Progress. Under CWIP, a utility can manufacture profits out of thin air by simply building a new facility.

It works like this: Suppose an electric company utility has $10 million worth of construction in progress during the year and prevailing interest rates are 10%. The firm is allowed to report a "return" of 10%, or $1 million. After all, the utility will presumably earn that much on its new plant sometime in the future. "In their financials they would show fairly significant earnings reported," says Hildahl. "But if you look on a cash-flow basis, it's not there."

The problem is that commissions sometimes go overboard in pushing off expenses and roping in income in order to make utilities look good. "If you are dealing with an elected commission or someone who has only a year to go in his term and wants to run for governor," Hildahl explains, "he wants to delay or defer rate increases to future periods and push it on future generations."

Putting a lien on the future has always been necessary in the utilities industry, of course. But critics complain that not only do the new rules leave regulators unchecked, they also give accountants too much leeway. "The previous rule required there to be an assurance beyond a reasonable doubt that any costs would be recovered in the future," says Arthur Young's Ley. "This rule only requires that there be reasonable assurance."

All of which runs directly against current trends in rate setting. Once regulators could raise rates at will with little falloff in consumption. But high energy costs have changed that. Look, for example, at Washington Public Power Supply System, where a slowdown in electricity consumption and huge cost overruns have played havoc with major construction projects.

"In the past one didn't have to worry very much about the ability of a utility to recover its costs and earn a full and fair rate of return," concludes Hildahl. "But now a number of public utilities are running into competition from other sources. I can see situations where an accountant should say that a liberal regulatory rule treatment should not be allowed because there aren't enough assurances that they will be able to recover costs in the future." Unfortunately, the FASB may have just made that decision more difficult. ■

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It's far from high tech, its products are mundane, it hasn't made a major acquisition in years. So why is NSI so profitable?

Erwin Zaban's secret weapon: good management

By Barbara Rudolph

ERWIN ZABAN, the wiry, gravel-voiced chairman of National Service Industries, leans back in his chair and puffs his ever-present cigarette. "I've never sold one share of my stock," he says. "Given plenty away. But I have a funny feeling about selling. . . . Sentimental, I guess."

In Zaban's case sentiment certainly has paid. The longer he holds, the more valuable his shares seem to become. Although he and his family own only 4% of the 16.4 million outstanding shares, that little 4% is worth about $22 million on paper. That means the whole company has a market capitalization of about $550 million, which is, to say the least, astounding. For National is an obscure Atlanta-based conglomerate, a grab bag of utterly mundane businesses. Its Lithonia Lighting subsidiary is the nation's largest distributor of lighting fixtures. The National Linen group supplies hospitals, restaurants and factories. Zep Manufacturing produces chemicals for sanitation. Other small divisions make things like men's shirts and business envelopes.

This oddly assorted and seemingly random miscellany earned National Service $51 million on revenues of $885 million last year. With negligible long-term debt, NSI's return on capital has averaged 17% over the past five years. That's the best performance among all industrial service firms ranked in the Forbes 35th Annual Report on American Industry—and it isn't lost on savvy investors like Warren Buffett. His Berkshire Hathaway and its subsidiaries own about 2% of NSI. In Buffett's 1981 annual report he selected Zaban, along with Capital Cities Communications' Tom Murphy and Teledyne's Henry Singleton, for special praise.

NSI's Erwin Zaban
Of lights and linen.

What's the secret? It's no secret really, except that Zaban takes seriously the word "service" in NSI's name. For example? Well, take the lighting division, which accounts for 29% of operating profits. Zaban's sales force doesn't just sell hardware, but works with architects and tries to provide a package of equipment that fits a new building's overall design and structure. This special attention is important because, unlike the local firms that abound in the industry, NSI has not staked out the less competitive specialty market. What it sells is basically a commodity product embellished with service and with a full product line that competitors are not always able to match.

The strategy is much the same at National Linen, which pulls in another 35% of NSI's operating profit. All towels may be basically alike, but the reliability and consistency of suppliers aren't. "If a customer needs a delivery rushed in the middle of a storm, you do it," says President Sidney Kirschner. Though National was slow to emphasize sales to hospitals and nursing homes, a market that is growing 20% annually, such customers now account for one-quarter of its revenues. Former nurses have become some of the firm's most successful salespeople. "They tend to feel badly paid, and they're eager to make money with us," Kirschner explains.

Not surprisingly, NSI's disparate divisions are autonomously run. There are only two vice presidents between division heads and the top, and Zaban treats every company dollar as if it were his own. "We're stingy," he explains. "There are no company cars, and everyone travels tourist."

There was nothing fancy about the strategy behind NSI's growth, either. In a Sixties acquisition spree, Zaban followed in the footsteps of his retired predecessor, Milton Weinstein, his old friend and neighbor. Weinstein brought Zaban to NSI in 1962 with the purchase of his Zep Manufacturing. Zaban followed that pattern in some of his early acquisitions, buying up friends' businesses after he became president in 1966. He shunned turnarounds and insisted upon acquiring solid management that would stick around after the merger. Despite a few misjudgments, the cronyism worked. "We didn't want people to take our stock and go to the seashore," Zaban explains.

Of what is good management made? Of close attention to detail as much as anything else—minding the pennies and letting the dollars take care of themselves. Little things, details, are especially important in a service business. Which helps explain why NSI hasn't done much acquiring lately. Zaban isn't convinced that he can take a poorly managed company and perform miracles with it, and where will he find companies to buy that are as well run as NSI's current divisions? To keep earnings growing in the absence of acquisitions, NSI has been using excess cash flow to buy in its own stock. And why not? Zaban says that with NSI's fat return on equity, most potential candidates "look pretty poor." Empire-building it will leave to companies whose managements have a lesser stake in the company than Zaban has. ■

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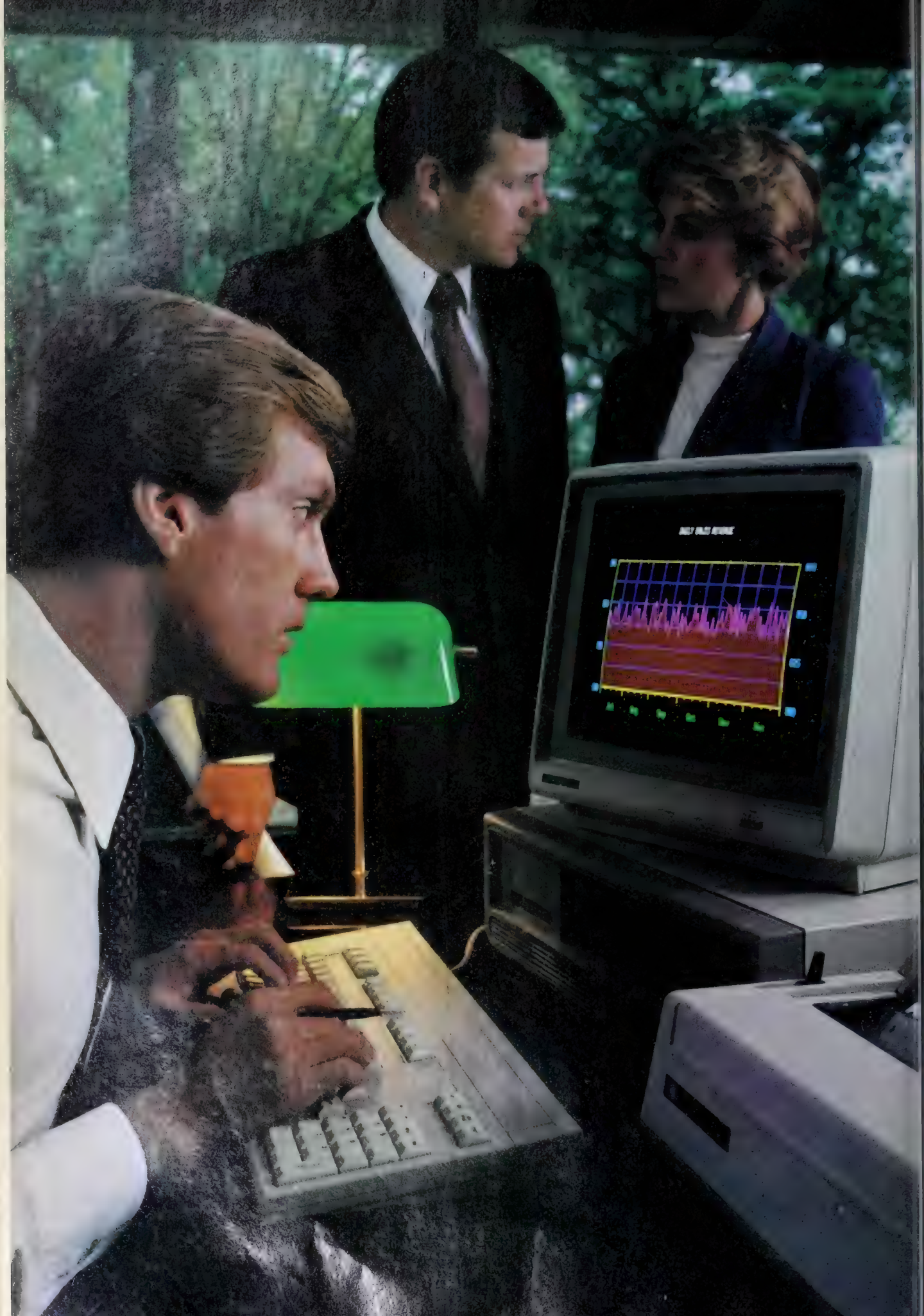

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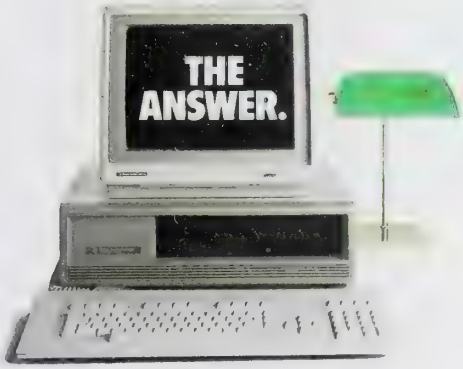

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A camel may be a horse designed by a committee, but it is useful, nevertheless. So is the F/A-18, despite the reasoning behind it.

The flying station wagon

By Subrata N. Chakravarty

You would think McDonnell Douglas' controversial F/A-18 airplane had run into trouble enough. But then in late January Deputy Secretary of Defense Paul Thayer, a former test pilot, took an F/A-18 up for a spin at Patuxent Naval Air Station in Maryland. On landing, Thayer couldn't get the plane's nose gear to extend. He had to employ a backup hydraulic system to give him a landing wheel. Then the main brakes failed, and Thayer had to pull the emergencies. Thayer laughs off the glitches now, but his introduction to the airplane destined to replace the Navy's A-7 light bomber—made by LTV when Thayer was its chief executive officer—hardly warranted hurrahs.

The Navy and Marine Corps propose to buy 1,377 F/A-18s to replace all their obsolete F-4 fighters and the Navy's A-7 bombers. The estimated price tag, including inflation: $39.8 billion, one of the most expensive items on the Defense Department wish list. But the F/A-18 has come under a lot of unfriendly fire. Congress is itching to cut defense costs. Critics complain most about F/A-18 costs. But they have other gripes. Last October, stories had it, the Navy's operational evaluation units—two squadrons of officers independent of the F/A-18 test group—recommended against certifying the plane for carrier-based attack, or bombing, missions because of its failure to meet range and other specs. In February Thayer supposedly recommended sharp cutbacks in the F/A-18 program, to eliminate the attack mission. If Thayer did indeed make such a recommendation, it was not intended to help his former company. The A-7 production line had already been shut down and is being converted to building parts of the B-1B bomber. Instead of the F/A-18, the A-7 would be replaced by Grumman Corp.'s A-6 medium bomber, in service with the fleet for over 20 years.

McDonnell Douglas' F/A-18 strike fighter
Yes, it will fly.

A skeptic might assume that the Pentagon is once again blowing billions and not getting value. But that is a simpleminded view. As it turns out, the F/A-18 may indeed be the right airplane, even though it may get built for strange reasons.

McDonnell Douglas and the Navy designed the F/A-18 as a "strike fighter" that can attack either ground targets or other aircraft. Critics argue that it can perform neither mission as well as planes built exclusively for one purpose or the other. It cannot intercept other aircraft at very long range, as the F-14 can, nor can it carry a maximum payload in poor weather as far as an A-6. The F/A-18's admirers concede that. But they say the plane can perform both types of missions adequately, and in that dexterity lies its usefulness. The F-14 is weak in ground attack and dogfighting. The A-6 is useless in air-to-air combat and too sluggish to avoid ground fire. If the F/A-18 leaves anything to be desired, it is because it is the result of necessary compromises in developing a dual-mission aircraft. The idea of a strike fighter makes it necessary to marry two contradictory sets of characteristics: speed and maneuverability on one hand, and capacity and strength on the other. Cross a sports car with

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a diesel truck and you get the automotive equivalent of an F/A-18, something like a supercharged station wagon. But the idea is attractive enough that Canada, Australia and Spain have decided to buy a total of 300 of the planes.

It's an expensive mating, and the F/A-18 is not remotely the inexpensive alternative to the F-14 that it was intended to be. When the development process began in 1975, the F/A-18 was to cost $8 billion for 811 planes. Now the cost is up to $40 billion for 1,377 planes. Increasing the number of planes and stretching out its rate of production helped increase costs, but inflation in the late 1970s gets the biggest blame. According to Defense Department figures supplied by McDonnell Douglas, the cost per F/A-18, excluding the effect of inflation, is up only 4%, vs. 21% for the F-15 and 37% for the F-14. But as dollar costs have risen, opponents have argued more vociferously to cut back or kill the program and buy more F-14s and A-6s. "If you're going to buy attack planes, and the better one is less expensive, it's pretty hard to defend buying the F/A-18," says Grumman President Joseph Gavin Jr., who argues that the Navy could save $5 billion by replacing the A-7s with A-6s.

The key issue, says Lehman, is survivability. "It's not an A-6, but if they get jumped, you're going to lose the A-6 and you won't lose the F/A-18. [The F/A-18 pilot] would pickle his bombs [drop them in the sea], and then go shoot down the [attacker]. An A-7 would pickle his bombs and then get shot down."

But Navy Secretary John Lehman says the A-6 will cost far more to operate. That's because the F/A-18 program is one of the few defense programs to apply technology as it is applied in civilian industry—to reduce operating and maintenance *costs* rather than trying only to get the maximum performance. As a result, each F/A-18 squadron can employ 50 fewer technicians. The plane requires only one-third the maintenance time of an A-6. With a projected buy of over 50 squadrons and a service life of 20 years, that adds up to billions of dollars in savings. And Lehman, himself a former A-6 navigator, says that, except for range, the A-6 is not better than the F/A-18. With a normal com-

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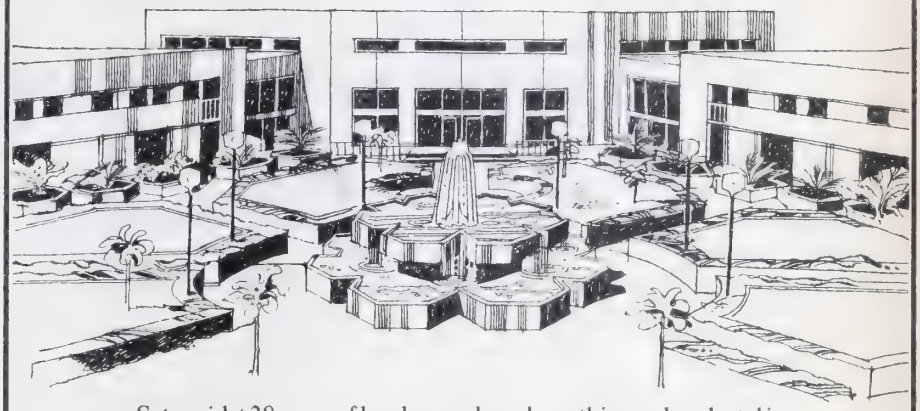

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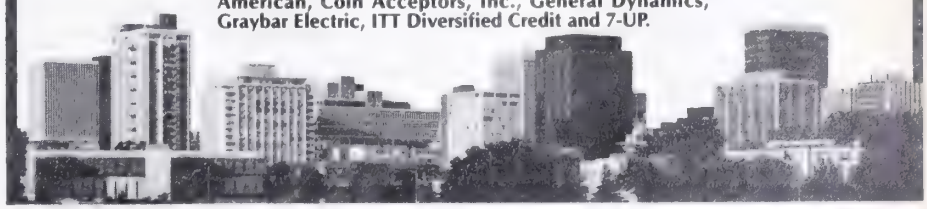

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bat radius of 450 miles, the F/A-18 falls considerably short of the striking distance of an A-6 or A-7, but exceeds the 270-mile range of combat missions during the Vietnam war.

The key issue, says Lehman, is survivability. "It's not an A-6," he told a congressional subcommittee recently. "But if they get jumped, you're going to lose the A-6 and you won't lose the F/A-18. [The F/A-18 pilot] would pickle his bombs [drop them in the sea], and then go shoot down the [attacker]. An A-7 would pickle his bombs and then get shot down." As would an A-6.

"The attack aircraft was the product of a cultural expectation of air superiority, as if it were the birthright of any American military force. They saw it as a (bomb-carrying) truck. The A-6 and the A-7 are not obsolete as aircraft—they are obsolete as concepts."

Edward Luttwak, of Georgetown's Center for Strategic & International Studies, goes further. He calls the idea of a pure attack aircraft a romantic American military delusion about war. "The attack aircraft was the product of a kind of cultural expectation of air superiority, as if having air supremacy over the battlefield was the birthright of any American military force," Luttwak says scornfully. "So they developed the notion that the proper business of an attack aircraft is to carry the maximum amount of bombs and have the most range. They saw it as a truck. But if you go against a real air defense, the A-6 and the A-7 just don't survive. They don't come home. They are not obsolete as aircraft—they are obsolete as concepts."

As it stands now, the F/A-18 may get cut back. But any cut will be cosmetic and be far in the future. In any case, Thayer recently said, no big decision seems likely for a year or so.

The reason the F/A-18 will go forward has little to do with merit alone. Simply put, now that LTV is out of the business of building naval aircraft, the Navy needs McDonnell Douglas as a counterweight to Grumman. "If we dropped either of [the planes] then the other guys would have a monopoly," says Lehman. "The only thing surer than death and taxes is that prices rise in sole-source situations."

What he's almost saying is this: billions for defense, but not one cent more than necessary for Grumman. ■

In Arkansas

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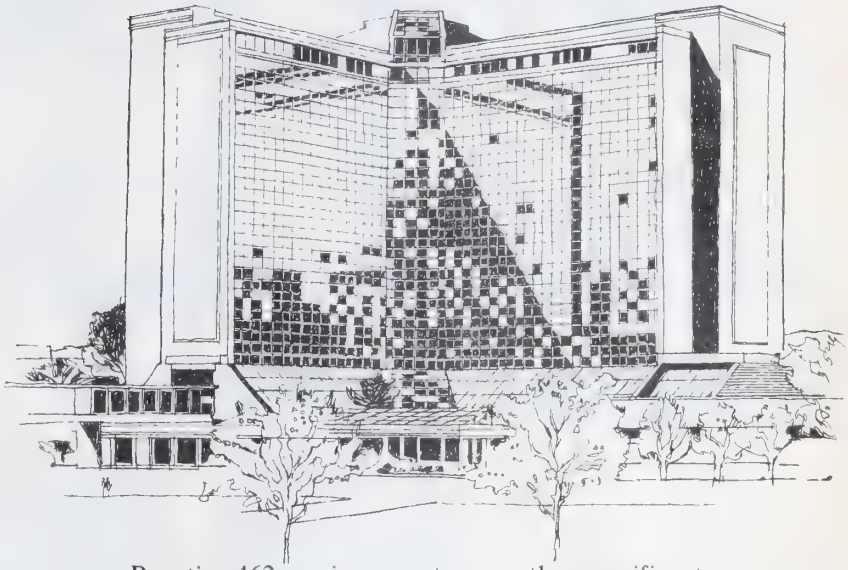

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The IRS wants companies to capitalize computer programming expenses. Will that discourage innovation?

Hard questions about software

By Jill Bettner

WITH HEAVY INDUSTRY up to its smokestacks in problems, you would hardly expect the government to attack one of the few bright spots around. Yet that's what the Internal Revenue Service is threatening to do. It is proposing controversial new regulations that restrict two powerful tax incentives to develop computer software.

The areas under attack are the 25% research and development tax credit enacted by Congress just two years ago and the ability to write off software development expenses in one year. Under present tax rules, companies have the choice of expensing software R&D right away or of capitalizing these costs and writing them off over the useful life of a new system, typically five years. As you would expect, most companies take the current-year deduction on their tax books, even though they frequently capitalize these same expenses on their public financial statements. That way, taxes are lower and earnings are higher.

The proposed rules would severely limit the kinds of R&D costs on which companies can take both the immediate deduction and the 25% credit. If these rules are implemented, only "new or significantly improved systems" will be eligible for the tax breaks. That frightens software suppliers who worry that it may exclude all but the most risky projects.

Another aspect of the proposal raises hackles, too. The decision as to whether certain R&D expenses are eligible to be charged off will be made after the fact by the IRS. Critics argue that corporations need more security than this, especially when the expenditures involved can sometimes amount to 1% of total sales.

If they go into effect, the new rules will hit the software development industry hardest. But Charles Medallis, R&D tax specialist with Arthur Andersen & Co., says he expects the rules will have a "ripple effect" on computer manufacturers as well as makers of modems, disks and other components. Any company that develops its own software, inside or outside the computer industry, will also be affected. Why? Software is typically the biggest expense in upgrading existing computer systems. Without the current deduction for development costs, companies will be less likely to spend money on data processing hardware as well.

The IRS, on the other hand, argues that its software proposals are in line with the existing tax treatment of both tangible and intangible expenses for other kinds of research. But software companies disagree with that contention. They say they are being forced to meet a much stricter standard than is applied, for example, to the development of new drugs. "We'll have to attempt to reinvent the wheel to get the same tax breaks for software as other industries," says Larry Goodman, director of taxes for Computer Sciences Corp. "And we'll have to know going in that there's a high risk we'll fail."

There may be a subtler competitive issue involved here, too. "It's ludicrous," says Arthur Carr, vice president and general manager of Motorola's information systems group. "The U.S. is clearly ahead of the rest of the world in software development. But if we do something like this to impede that progress, we could lose our lead to the Japanese."

The IRS plans to hold hearings on its proposals Apr. 19, and the meeting will doubtless be swamped with software manufacturers. The least they hope for is a clearer definition of the kinds of R&D expenses that would fall under the rules. As the language now stands, they say, the IRS has too much freedom to decide arbitrarily what is and what is not deductible.

The politicians who worked to enact the tax credit for research and development expenditures back in 1981 are among those who are particularly outraged at the possible problems stemming from the new IRS proposals. "It was our intention that the development of new or innovative software was to qualify for the credit," says Senator John Danforth (R-Mo.), who was one of the principal sponsors of the two-year-old measure. "The purpose of the credit is to encourage increased productivity through the development of new technology. Whether productivity increases are achieved through the development of a better industrial robot or better computer software is irrelevant."

Final rules on the credit for software R&D would be retroactive to June 30, 1981, when the credit was adopted. The changes in the deductibility of those costs would be effective when they are issued.

Danforth also says he is hopeful that the IRS will amend its proposed rules to make them more liberal. If it doesn't, however, he will consider introducing more legislation to correct the problem. Danforth is one of several co-sponsors of a bill that was introduced in early March to make the R&D credit permanent. It is now scheduled to expire at the end of 1985.

As one final element of controversy, tax experts say the proposed regulations could affect software R&D limited partnerships formed by individual investors (FORBES, *Dec. 6, 1982*). These programs, now among the hottest shelters around, also depend on the current deductibility of research costs. As a result of the IRS proposals, Arthur Andersen plans to include warnings in some prospectuses it is writing for partnerships that are coming to market in the next few weeks. If the taxmen get their way, the deductions that allow these shelters, as well as the R&D credit, may disappear soon. ■

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AT&T has always conducted its financial affairs with a view to long-term requirements. We have never sacrificed long-term stability for short-term gain.

The breakup is complicated, but we're very good at managing complexit After all, the nationwide telecommunications system is incredibly complex, and we manage it so well the American public takes the world's best phone servi for granted.

Even so, many investors are unclear about what all this change in our company will mean. And we're especially sensitive to the need be responsive to our share owne large and small. Of our record 3.1 million share owners, one million own fewer than 20 share another million own between 20 and 99. Our share owners a a very loyal body. Many familie have held AT&T stock for decad and passed it on from one gener ation to another. We feel a speci obligation to them.

Understandably, when it was first announced that we wou divest the 22 Bell telephone companies, we received a great many letters from our share owners. Many of them said: "When you divide my stock, don't send me 22 piec of paper." To respond to that concern—and also to enhance the financial and operational viability of the local telephone companies—we later announced plan to group them into seven regional holding companies of about the same size in term of assets, number of customers, etc.

Still, a lot of share owners said: "I'm not sure I want seven pieces of pape And so, in our plan for reorganization, we developed arrangements which will

IAN BEFORE.
CITING NEW OPPORTUNITIES."

— Virginia Dwyer, Vice President and Treasurer, AT&T.

elp those share owners with small accounts to consolidate their regional company oldings if they so choose.

One of the most frequently asked questions is whether 1984 dividends f AT&T and the seven regional companies will add up to the same amount s the present AT&T dividend. What is voted by the boards of directors of the olding companies will be up to those companies; we can't speak for them. owever, it is our intent to divest the operating companies in a financial condition at, with reasonable regulatory treatment, should permit them to pay divi-ends adding up to the same total dividend.

Each of the regional companies is a strong organization, with experienced anagements and skilled work forces. They have lines into virtually every ome and business in their territories. They will be offering exciting new services, ich as advanced mobile telephone service, which promises to be one of the stest-growing offerings of the 1980s. In short, they're well established in the orld's fastest-growing industry.

As we see it, the evidence points to bright prospects for both the regional ompanies and AT&T.

The agreement with the Department of Justice frees AT&T from utmoded restraints, allows us to make the fullest use of our own technological dvances, and enables us to compete more fully and fairly in the marketplace.

The decree also retains unified management of the nationwide long istance network. And it preserves the close relationship between Bell Laboratories nd Western Electric. These organizations will continue to bear a significant esponsibility for maintaining America's leadership in the world's telecom-unications market.

AT&T will be a hybrid of a regulated telecommunications company and n emerging growth company. That raises an interesting question: can people sed to managing a business exceptionally well in a regulatory environment ove into a fast-moving marketing environment and succeed? In a word, yes. nd we're going to demonstrate very clearly that we can.

Our business is riskier than before, but we have some exciting new portunities. Both AT&T and the regional companies plan to take full advantage f those opportunities as we move into the Information Age. I'm confident that ur share owners are going to be pleased and roud of our future performance.

Bell System

Tracor gets its glitter from high-tech defense products. It gets its substance from simple things like auto fuses and seat-belt buzzers.

Cost-minus versus cost-plus

By Anne Bagamery

When Tracor Chairman Frank McBee, 63, gave a presentation on Wall Street last month, defense-stock followers turned out in force to hear the one-time University of Texas mechanical engineering professor. That's because Austin, Tex.-based Tracor is the world's leading supplier of radar-fooling devices for aircraft—equipment likely to survive congressional cutbacks in military spending.

Not surprisingly, then, Tracor is on everybody's buy-list, even at its recent price/earnings multiple of 19. Earnings per share has grown at a compound annual rate of 24% for a decade, while sales growth averages 18% for the same period. The company's five-year return on equity has averaged 20% a year.

But McBee knows, even if much of Wall Street doesn't, that Tracor's real strength probably lies far down the technology curve from electronic warfare. The company also makes laboratory instruments and aerospace guidance systems, but its major profitmaker is Littelfuse, a 56-year-old Des Plaines, Ill.-based company that McBee bought in 1968 for $10 million. Wisely, Tracor leaves Littelfuse pretty much to its own devices—which are little fuses, cheap pieces of glass- or plastic-housed metal that melt, or fuse, if too much current passes through them. Littelfuse makes fuses for autos, home appliances and small computers. It sells directly to the Big Four automakers and to companies like Texas Instruments, Westinghouse and General Electric, as well as to the replacement market.

Walter Clements, Littelfuse's courtly, Russian-born president, ticks off some of his 16,000-odd unglamorous products. "You wake up in the morning. Turn on the coffeemaker, it has one of our fuses. Switch on the *Today* show on TV, another fuse. Get in your car to go to work, and my God, we've got you surrounded. Seat-belt buzzers, brake lights, turn signal flashers, half a dozen fuses—all ours."

Last year, despite competition with captive suppliers and McGraw-Edison's Bussmann division, Littelfuse turned in 33% of Tracor's operating profit—$14.7 million on revenues of $74 million. In the past four years, a rotten period for cars and appliances, Littelfuse's operating margin after depreciation has nearly doubled; it now stands at just short of 20%, almost twice as fat as the 11% margin earned in Tracor's more glamorous aerospace business.

How can making gewgaws be so profitable? A tour through a Littelfuse manufacturing facility is instructive. Machines do everything from twisting springs to extruding plastic presentation boxes, the result of $15 million in capital spending over the past five years.

This automation works because Littelfuse products are mostly variations of basic designs and are all made with the same raw materials. By simply adjusting some knobs, for example, Littelfuse can change from

Littelfuse President Walter Clements at the drawing board
The real money is in the doohickeys.

Tracor Chairman Frank McBee
The professor knew what to buy.

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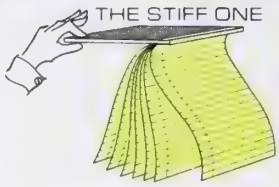

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producing buzzers to switches. Clements has compounded his advantage by scrapping products, such as door chimes, that deviated too much from standard and carried lower margins. And he has protected himself from potential foreign competition by licensing a Japanese firm to provide the patented auto fuse for made-in-Japan vehicles.

Littelfuse is also long on ingenuity. Years ago a salesman heard that a woman had electrocuted herself while washing down the outside of her refrigerator. He returned to headquarters with an idea for a shockproof refrigerator light switch, which is now used on 90% of domestic models. When Texas Instruments discovered in March that users of its 99/4A home computer could receive an electric shock, Clements stopped the lines and cranked out 500,000 specially designed microfuses in ten days to save TI's bestselling product.

Littelfuse's success with microfuses for computers illustrates the wisdom of understanding what you are really good at and sticking with it. In its early days (the company was founded in 1955) Tracor launched an ill-fated foray into computer peripherals. "In theory, we were going to get the jump on everybody and become the best supplier of disk drives and bar-line printers in the world," recalls McBee. In practice, however, Tracor's products were full of bugs and had to be yanked off the market. The resulting $28 million writeoff sent the company into the red in 1970. Today Tracor does nicely, not by taking on the whole home-computer market, but by providing just the fuses.

How can Littelfuse make big money on little bits of metal and plastic? Spending $15 million on machines helps. So does scrapping products that deviate too much from the basic designs.

Tracor's defense business is another matter from its disastrous foray into computer equipment. Its defense backlogs recently were at an alltime high of $180 million: "It's cost-plus work. The government picks up R&D, and bills get paid on time," McBee explains. Nice, of course. But McBee also appreciates the fact that the biggest rewards in business go to those who also think in terms of cost-minus, how to make things a few cents cheaper or a few days faster than the competition. ■

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While the Cassandras wail of defaults and bankruptcies, bank stocks dance to a merry tune. What's going on here?

Nearer, my God, to Thee?

By Ben Weberman and Robert McGough

It reminds us of those grim jokes about rearranging the deck chairs on the *Titanic*. At a time when a good many people think the banks will never again see billions of dollars that they so airily lent to foreign countries, the bankers, nothing if not resourceful, have figured a way to reshuffle the doubtful loans in such a manner as to help ensure the banks a banner year for 1983.

How can that be? It's really very simple. Manufacturers Hanover (assets: $64 billion) shows how this works. Manny Hanny had about $1.7 billion at risk in Mexico, but since the Mexicans couldn't pay the short-term loans, the bank, like its colleague banks, agreed to "convert" about half the Mexican paper into much longer paper (eight years). In return, the Mexicans agreed to increase the interest rate from 0.6% above the London interbank rate to 2.25% over. Of course, Manny Hanny isn't getting cash; it simply tacks the interest on to the existing debt. Never mind: Whether cash or not, the higher interest can be carried right to the bottom line. From Mexico alone Manny Hanny stands to benefit to the tune of $15 million or so this year. Meanwhile, all the banks are benefiting from the well-known stickiness of interest rates on the downside. Almost across the board—in loans to corporate customers and individuals as well—the banks are seeing to it that the interest rates they charge are dropping more slowly than the interest rates they pay for money.

Are the stockholders getting an honest count in all this? It depends on what happens to the world economy and in world politics. Since no one can predict the future, the banks are justified in assuming things will come out right in the end. They usually do.

But what about writeoffs on loans that have clearly gone bad? Oh, there will be plenty of them, but so far, at least, the banks have easily handled them out of accumulated loan-loss reserves. The reserves are established in good earnings years when a few million dollars taken out of profit don't mean much. Fortunately for the banks, they don't have to mark their foreign loans down to anything like true market value. See what we mean about rearranging the deck chairs to divert the passengers from that gaping hole in the hull?

So, now you know why the stocks

A few superlatives

Performance highlights drawn from the tables on the following pages

Biggest-fastest			Smallest-slowest	
Citicorp (NY)	$129,997	**Total bank assets[1]—1982**	Equimark (Pa)	$3,215
Republic New York (NY)	35.4%	**Growth of assets[2]** Industry median: 11.7%	First Pennsylvania (Pa)	– 8.5%
State Street Boston (Mass)	59.9%	**Growth of earnings per share[2]** Industry median: 10.3%	Seafirst (Wash)	P–D
Allied Bancshares (Tex)	25.3%	**Four-year return on equity** Industry median: 14.5%	First Pennsylvania (Pa)	–12.4%
Trust Co of Georgia (Ga)	7.20%	**Net interest margin—1982** Industry median: 4.57%	First Chicago (Ill)	2.23%
JP Morgan (NY)	$39,118	**Value of managed trust assets[1]**	Marine Midland (NY)	$3,371
California Federal S&L (Cal)	1.85%	**S&Ls' spread between earnings assets and cost of funds**	Gibraltar Savings (Tex)	–0.85%

[1]Dollar value in millions [2]Compounded annual rate 1978/82. P–D: Profit to deficit

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1983 Annual Banking Survey

100 largest bank holding companies: a statistical profile

Rank	1982 size measures ($millions) Total assets	Total deposits	Nonperform assets % total assets	Total loans	Loan loss res as % of loans	Total invest-ments	Standby letters of credit	Total capital	Long-term debt % capital	Total operating income	Net income[4]	Company and head
1	$129,997	$76,538	1.4%	$86,524	0.9%	$4,771	$15,313	$15,381	68.4%	$17,814	$747.0	Citicorp (NY)
2	122,221	94,342	2.1	74,591	0.9	7,149	6,795	6,761	32.3	14,955	388.8	BankAmerica (Cal)
3	80,863	56,858	1.9	55,156	1.1	4,130	5,300	4,611	28.7	10,171	332.5	Chase Manhattan (N
4	64,041	43,825	1.5	42,514	0.9[5]	2,527	7,700	4,278	41.8	7,640	296.3	Mfrs Hanover (NY)
5	58,597	37,910	0.9	31,495	1.1[5]	6,112	5,600	3,419	20.7	6,885	441.7	JP Morgan (NY)
6	48,275	27,998	1.7	29,768	1.1	3,802	6,140	2,546	23.6	5,515	269.1	Chemical New York
7	42,899	28,175	4.5	32,820	1.1	2,065	4,340	2,982	42.7	5,900	84.4	Continental Illinois (
8	40,884	30,542	2.8	22,893	1.2	4,164	1,600	2,792	35.9	4,608	228.4	First Interstate Bncp
9	40,427	24,493	1.4	21,034	1.2[5]	1,755	5,638	1,996	22.1	4,639	228.5	Bankers Trust NY (N
10	36,991	25,848	2.2	24,927	1.3[5]	1,920	2,253	2,806	46.9	4,491	234.1	Security Pacific (Cal)
11	35,876	27,419	2.4	21,830	1.0[5]	1,315	3,233	2,178	31.5	4,402	144.0	First Chicago (Ill)
12	24,939	18,195	3.1	16,131	1.0	703	1,909	1,393	15.3	2,894	71.1	Crocker National (Ca
13	24,814	18,180	2.3	18,838	1.0	604	824	2,482	55.7	3,290	141.8	Wells Fargo (Cal)
14	21,030	14,405	2.1	12,654	1.3	3,230	1,024	1,627	31.5	2,416	222.9	InterFirst (Tex)
15	20,294	12,328	1.7	11,365	1.6[5]	1,407	929	1,561	31.6	2,355	142.7	Mellon National (Pa)
16	20,239	15,057	2.1	12,182	1.2	1,379	1,055	1,489	40.7	2,412	88.4	Marine Midland Banl
17	19,514	14,153	1.1	9,975	1.4[5]	1,025	1,109	1,127	30.6	2,277	82.6	Irving Bank (NY)
18	18,267	11,674	1.7	10,335	1.2	1,390	1,013	1,295	31.7	2,745	129.1	First Natl Boston (Ma
19	18,217	13,212	1.0	9,760	1.3	2,350	490	974	10.5	1,798	170.0	Texas Comm Bancsh
20	17,585	11,971	1.6	10,674	1.3	2,554	519	2,183	51.8	2,081	114.1	Northwest Bancorp (.
21	17,218	11,942	1.5	9,950	1.3	2,545	688	1,192	25.5	1,934	156.7	RepublicBank (Tex)
22	16,899	11,877	2.2	9,161	1.1	2,656	1,102	1,352	31.9	1,961	115.9	First Bank System (M
23	16,567	13,355	1.8	9,366	1.4[5]	2,374	900	1,014	12.5	1,729	132.9	First City Bancorp (T
24	12,724	8,873	2.1	7,496	0.9	1,022	561	608	16.9	1,523	74.3	Bank of New York (N
25	12,407	8,580	1.3	5,684	1.2	1,809	317	871	13.9	1,406	77.4	NBD Bancorp (Mich)
26	11,611	7,401	0.9	5,384	1.5	1,804	566	859	20.1	1,307	115.7	PNC Financial (Pa)
27	11,560	7,922	1.3	5,559	1.4	1,955	237	801	33.8	1,073	77.0	NCNB (NC)
28	10,190	7,332	1.6	6,612	1.5[5]	1,291	672	725	23.9	1,142	103.3	Mercantile Texas (Te
29	10,028	8,175	8.0	7,226	2.4	421	285	580	21.1	1,398	–90.2	Seafirst (Wash)
30	9,280	6,770	0.5	2,536	1.6	1,229	84	767	38.9	1,249	75.2	Republic New York (
31	8,325	5,756	3.6	5,551	1.0	375	1,067	465	23.1	1,061	28.9	European American[6]
32	7,545	5,436	1.3	4,302	1.1	584	405	403	13.6	859	31.0	Union Bank[6,7] (Cal)
33	7,378	5,872	1.1	3,088	1.1	1,299	145	412	6.8	752	42.1	Comerica (Mich)
34	7,274	5,521	1.1	3,573	1.3	930	111	593	27.4	845	48.7	Southeast Banking (F
35	7,183	5,513	1.5	4,211	1.1[5]	1,034	87	411	0.0	807	51.0	Valley National (Ari
36	7,137	4,897	1.2	3,988	0.9	488	461	408	6.4	918	40.1	Harris Bankcorp (Ill)
37	6,932	5,759	0.5	3,385	1.4[5]	1,604	50	511	24.1	791	64.6	Barnett Banks of Fla
38	6,927	5,770	1.3	3,925	1.2	891	120	503	22.9	773	67.3	Southwest Bancshs (
39	6,916	4,933	1.1	3,668	1.3	919	95	445	3.1	810	77.7	Wachovia (NC)
40	6,823	4,488	1.3	2,972	1.5	1,425	272	483	18.2	661	46.7	National City (Ohio)
41	6,807	5,219	2.4	4,082	1.1[5]	682	265	386	3.6	818	21.0	Natl Bank N Amer[6,7]
42	6,647	2,280	1.5[8]	4,669	2.9	306	181[8]	1,205	66.8	886	16.4	Walter E Heller Intl[9]
43	6,504	5,544	3.5	4,406[5]	1.1[5]	647	126	438	21.1	789	3.3	Michigan National (M
44	6,301	4,172	1.0	3,154	1.3	571	247	524	24.9	770	60.5	Philadelphia Natl (Pa
45	6,253	4,369	2.2	3,399	1.0	568	325	368	8.1	826	33.6	Northern Trust (Ill)
46	6,168	3,673	0.8	2,886	1.6	999	56	357	22.0	663	50.0	First Union (NC)
47	6,011	4,971	1.9	3,985	1.9[5]	1,159	143	409	9.8	718	86.7	Allied Bancshares (Te
48	6,005	4,286	1.0	3,299	1.4[5]	1,127	40	452	26.7	635	51.5	Citizens & Sthrn Ga
49	5,865	4,260	2.2	4,026	1.2	371	155	439	18.1	732	39.2	Rainier Bancorp (Was
50	5,822	4,495	2.2	3,062	1.0	1,777	121	352	6.9	661	26.4	BancOhio (Ohio)

[1]Four-year average is a compounded annual rate: 1978-82. [2]From continuing operations after security gains or losses excluding gain on sale of operations and extraordi items. [3]Net interest income on a tax-equivalent basis as a percent of average earning assets. [4]From continuing operations before security gains or losses excluding gain on sa operations and extraordinary

	Growth measures[1]						Profitability & cost measures			Stock data			
	rage assets	Equity per share		Earnings per share[2]		Dividend	Return	Net int	Overhead				
	1982 vs 1981	4-year average	1982 vs 1981	4-year average	1982 vs 1981	4-year average	on equity 4-yr avg	margin[3] 1982	times NI 1982	Recent price	1982 EPS[2]	P/E ratio	Current yield
	4.8%	9.8%	10.8%	10.3%	33.3%	10.3%	15.0%	3.49%	4.7	39⅝	$5.60	7.1	4.3%
	6.2	8.6	4.5	−6.5	−13.6	10.5	14.8	3.10	7.7	20⅞	2.61	8.0	7.3
	2.9	9.4	3.9	8.7	−33.1	11.5	14.5	3.37	6.9	52	7.73	6.7	6.7
	6.8	8.4	7.9	8.6	26.1	8.9	14.0	3.10	4.5	43¼	7.78	5.6	7.0
	8.9	10.7	10.3	10.8	10.9	11.5	15.6	2.69	1.8	72½	9.53	7.6	5.1
	5.8	8.3	7.7	16.8	1.6	8.8	14.7	3.86	4.7	47⅝	8.41	5.7	6.8
	3.8	8.2	−0.9	−18.8	−69.7	10.3	13.4	2.48	8.6	22⅞	1.95	11.7	8.7
	14.2	10.7	6.3	5.2	−8.2	14.1	16.1	4.69	5.7	37⅝	5.35	7.0	5.7
	10.2	10.8	10.6	21.5	1.2	8.1	16.6	2.83	3.6	40⅞	6.97	5.9	5.5
	14.3	12.1	11.8	10.9	11.2	11.9	17.1	3.91	4.7	45	7.84	5.7	5.3
	14.8	4.4	5.3	0.4	11.7	4.0	8.9	2.23	4.5	21⅛	3.33	6.3	5.7
	20.3	10.9	5.9	−10.6	−10.0	8.0	11.7	3.71	9.9	28½	3.62	7.9	8.4
	2.5	9.1	10.0	4.3	9.0	9.6	14.5	4.06	6.0	28¾	5.81	4.9	6.7
	16.8	13.6	15.0	18.9	22.2	18.0	19.7	4.69	2.0	21⅞	3.80	5.8	5.5
	15.7	8.5	9.1	13.0	16.2	9.6	13.2	3.32	2.9	45⅞	6.83	6.7	5.3
	5.6	6.4	7.5	23.5	7.1	11.8	9.8	3.51	5.6	23⅞	4.54	5.3	5.9
	3.7	106	7.6	9.8	−17.2	10.7	15.3	3.15	5.5	46	9.13	5.0	7.7
	9.9	11.1	13.2	18.3	6.7	10.8	15.4	4.17	4.4	39¾	6.67	6.0	5.3
	23.8	16.8	18.6	22.9	20.5	15.9	21.5	4.55	1.9	38⅛	5.35	7.1	3.4
	11.3	7.9	3.2	−3.6	−20.0	11.2	13.6	4.43	6.2	27¼	3.08	8.8	6.6
	16.5	12.9	12.7	19.5	11.9	19.9	17.1	4.32	2.3	33⅞	5.18	6.5	4.8
	14.8	10.0	10.5	6.3	20.1	9.4	14.5	3.68	3.6	43	7.66	5.6	6.5
	18.2	15.7	17.9	13.8	−13.7	18.4	18.5	4.48	3.1	22¼	3.52	6.3	5.8
	9.0	7.1	9.2	13.3	19.8	7.4	14.3	4.05	5.0	52	10.18	5.1	6.5
	7.4	7.8	8.8	4.3	26.0	6.1	11.8	3.64	3.5	31½	6.69	4.7	6.6
	10.8	10.6	11.2	16.8	8.1	NC	16.2	4.29	2.7	35¼	5.09	6.9	5.4
	9.9	12.8	15.2	15.0	23.7	11.9	16.0	4.64	3.2	22⅛	3.18	7.0	4.5
	24.5	14.6	15.8	17.9	27.7	14.1	19.3	5.01	2.4	28¼	4.15	6.8	4.2
	9.2	2.6	−20.5	P–D	P–D	11.6	8.0	3.88	—	14½	−5.66	def	3.3
	27.5	19.2	14.1	22.3	−6.1	30.7	23.8	2.96	2.0	42¼	5.26	8.0	3.6
	0.8	13.5	6.7	21.2	−8.7	—	10.0	3.79	7.1	—	—	—	—
	4.9	9.4	5.7	1.5	5.4	—	11.0	4.76	8.1	—	—	—	—
	12.4	5.8	1.8	−2.8	9.5	8.7	11.3	3.57	4.8	25¼	3.91	6.5	7.9
	10.0	7.7	8.0	7.2	−10.8	18.9	14.8	5.15	5.4	21⅛	2.81	7.5	4.7
	12.6	12.5	8.2	5.3	−7.4	12.7	17.5	4.54	5.0	19	3.00	6.3	6.1
	7.3	5.6	5.6	7.3	23.7	7.3	9.4	3.11	5.7	32	5.42	5.9	6.9
	34.4	12.1	10.4	17.4	11.3	17.9	16.6	6.35	5.0	30	3.46	8.7	3.6
	16.1	12.1	14.6	18.4	28.7	13.1	16.7	5.13	2.7	23⅛	4.31	5.4	5.9
	14.0	9.7	8.4	10.5	3.1	18.9	14.3	5.51	4.1	36⅞	3.33	11.1	3.8
	12.3	7.3	7.2	−0.3	10.0	5.7	13.1	4.07	3.5	35¼	5.62	6.3	7.8
	14.4	10.6	4.9	−1.4	36.7	—	5.4	3.97	11.7	—	—	—	—
	7.2	4.7	−0.7	−18.0	57.6	5.5	9.0	5.19[8]	3.2[8]	30¼	1.34	22.6	4.3
	8.0	6.7	−2.7	−46.8	−91.0	15.1	10.7	4.50	57.3	16¼	0.30	54.2	7.4
	2.6	8.2	10.7	15.2	58.7	9.2	12.9	5.46	4.0	54¾	9.73	5.67	6.2
	6.6	6.8	6.0	5.8	−8.2	11.0	11.0	3.31	5.8	47½	6.71	7.1	5.7
	18.8	10.9	12.4	14.6	41.8	8.3	16.3	4.88	4.1	28⅝	4.31	6.6	4.3
	28.9	18.7	20.0	19.6	17.3	29.9	25.3	6.38	1.9	22¼	2.78	8.0	3.6
	8.7	13.7	13.3	47.8	14.4	NM	15.6	5.80	4.6	12⅞	1.67	7.7	4.3
	9.0	9.6	6.9	2.6	−8.9	13.0	14.0	5.31	5.5	28⅞	4.12	7.0	5.5
	12.3	4.3	4.6	−7.0	−19.1	−4.6	7.5	4.39	9.0	17	2.76	6.2	5.9

udes leases [6]Company not publicly traded; stock data not available. [7]Bank only; not organized as a holding company. [8]Bank only [9]Includes results of nonbank ations where applicable. [10]Three-year average. P-D: profit to deficit. D-P: deficit to profit. D-D: deficit to deficit. def: deficit. NA: not available. NC: not parable. NM: not meaningful.

1983 Annual Banking Survey

100 largest bank holding companies: a statistical profile

Rank	Total assets	Total deposits	Nonperform assets % total assets	Total loans	Loan loss res as % of loans	Total invest-ments	Standby letters of credit	Total capital	Long-term debt % capital	Total operating income	Net income[4]	Company and hea
	1982 size measures ($millions)											
51	$5,756	$4,077	3.1%	$3,495	1.0%	$ 667	$ 58	$668	33.2%	$690	$ 52.2	US Bancorp (Ore)
52	5,753	4,160	2.6	3,358	1.3	1,086	88	604	0.0	624	56.1	AmeriTrust (Ohio)
53	5,691	3,713	1.4	2,598	1.4	683	147	393	22.1	603	42.8	Mercantile Bancor
54	5,433	3,496	4.1	3,046	1.8	884	87	887	78.5	636	–18.8	First Pennsylvania
55	5,376	3,960	1.7	2,896	1.5[5]	839	65	372	27.1	614	35.4	Shawmut (Mass)
56	5,284	4,078	1.2	2,970	1.0	794	118	318	14.7	589	12.2	Manufacturers Nat
57	5,245	3,955	2.3	2,742	1.9	724	53	336	26.7	438	29.2	Huntington Bancsh
58	5,122	3,494	2.2	2,495	1.3[5]	884	200	382	24.2	617	23.2	Centerre Bancorp (
59	5,070	3,691	1.7	2,822	1.6	615	115	344	21.1	460	31.9	CBT (Conn)
60	5,065	4,089	1.0	2,685	1.5	868	165	311	18.7	642	35.4	Bank of New Engla
61	5,055	2,926	1.4	2,770	1.2	538	73	489	34.5	544	42.2	Maryland National
62	5,029	3,896	0.9	2,407	1.3	1,096	49	450	19.5	605	62.1	Banc One (Ohio)
63	5,004	4,095	0.3	2,265	1.2	1,219	44	369	17.2	529	38.7	Sun Banks of Flori
64	4,868	3,641	0.3	2,389	1.2	1,288	59	291	14.3	465	34.9	First Natl St Banco
65	4,848	3,444	0.9	3,338	1.3	602	211	376	21.5	524	44.4	United Virginia Bs
66	4,836	3,533	2.4	3,015	1.1	604	187	318	21.3	573	29.9	First Wisconsin (W
67	4,812	3,171	3.5	3,231	1.4	390	200	397	24.4	573	31.9	Girard (Pa)
68	4,717	3,662	0.9	2,836	1.1	825	118	411	31.3	549	43.7	Texas Amer Bancs
69	4,609	3,319	3.1	2,714	1.2	582	58	538	37.8	532	44.5	First Security (Utal
70	4,536	3,058	2.1	2,541	1.5[5]	399	100	529	56.2	547	39.5	Fleet Financial Gro
71	4,511	3,018	1.3	2,109	2.3	632	72	300	13.8	482	57.2	Trust Co of Georgi
72	4,480	3,046	1.0	2,503	1.7	243	36	349	25.5	478	43.3	First Atlanta (Ga)
73	4,339	3,535	1.4	2,389	1.6	530	45	300	18.7	465	39.1	Midlantic Banks (N
74	4,156	3,576	1.1	2,930	1.0	439	139	262	13.0	493	16.4	California First Bk
75	4,135	3,507	NA	2,455	0.8	507	106	275	13.8	483	10.3	Bank of Tokyo Tru
76	4,128	3,322	1.4	2,078	1.2[5]	431	102	218	15.9	390	29.1	Hartford National (
77	4,120	3,019	2.1	1,724	1.8[5]	319	157	278	25.1	444	28.5	Fidelcor (Pa)
78	3,915	2,483	0.2	1,327	2.2	850	63	269	22.0	469	50.4	State Street Boston
79	3,911	3,020	0.7	1,820	1.3	907	52	315	21.9	471	29.4	Society (Ohio)
80	3,892	3,015	1.9	2,220	1.3	483	117	290	29.1	446	28.2	Lincoln First Bank
81	3,874	3,107	0.4	2,153	1.4	733	128	281	27.1	444	33.3	Virginia Natl Bksh
82	3,839	2,728	3.8	2,456	1.3	325	90	252	23.0	521	9.7	BanCal Tri-State (
83	3,820	3,293	2.2	2,078	1.1	951	51	276	34.6	443	20.3	First of America Bl
84	3,716	3,054	1.0	1,627	1.2	488	108	201	0.0	407	21.4	Riggs National (DC
85	3,710	3,168	0.4	1,998	1.0[5]	717	60	256	6.3	437	33.1	BayBanks (Mass)
86	3,653	3,050	0.6	1,623	1.6	1,079	34	374	22.4	365	43.7	Norstar Bancorp (N
87	3,522	2,645	2.1	2,259	1.4[5]	394	117	264	24.2	415	23.9	United Banks of C
88	3,498	2,719	0.7	1,665	1.0	685	29	271	0.0	342	21.7	Florida Natl Banks
89	3,447	2,299	1.3	1,757	1.2[5]	298	48	269	33.3	398	25.0	First Maryland Bnc
90	3,409	2,757	1.4	1,827	1.2	468	86	221	8.4	327	12.6	Fidelity Union Bnc
91	3,407	2,569	1.6	1,803	1.3[5]	429	90	215	3.4	369	30.1	American Security
92	3,392	2,512	0.9	1,655	1.4[5]	541	43	241	13.6	392	31.2	First Tenn Natl (Te
93	3,353	2,530	1.0	2,005	1.1[5]	269	24	234	22.8	412	24.0	Bank of Virginia (V
94	3,343	2,545	1.3	1,569	1.6	587	99	278	8.2	360	31.4	Commerce Bancsh
95	3,326	2,203	2.1	1,859	2.3	414	150	256	18.6	368	20.0	First Oklahoma Bn
96	3,314	2,489	3.8	1,743	2.6[5]	386	158	195	16.7	400	–10.9	IntraWest Financia
97	3,255	2,450	0.7	1,779	1.6[5]	643	103	297	18.7	374	31.9	AmSouth Bancorp
98	3,232	2,591	1.0	1,645	1.4	679	32	195	25.8	331	20.2	United Jersey Bank
99	3,225	2,501	1.0	1,748	1.3	371	57	234	20.6	372	22.5	Dominion Banksh
100	3,215	2,453	2.1	1,488	1.2	921	80	235	46.6	364	4.5	Equimark (Pa)
			1.5		1.3				22.3			MEDIANS

[1]Four-year average is a compounded annual rate: 1978/82. [2]From continuing operations after security gains or losses excluding gain on sale of operations and extraor items. [3]Net interest income on a tax-equivalent basis as a percent of average earning assets. [4]From continuing operations before security gains or losses excluding gain on operations and extraordinary items

Growth measures[1]						Profitability & cost measures			Stock data			
age assets 1982 vs 1981	Equity per share 4-year average	Equity per share 1982 vs 1981	Earnings per share[2] 4-year average	Earnings per share[2] 1982 vs 1981	Dividend 4-year average	Return on equity 4-yr avg	Net int margin[3] 1982	Overhead times NI 1982	Recent price	1982 EPS[2]	P/E ratio	Current yield
10.3%	12.2%	8.8%	3.1%	–19.2%	13.7%	16.7%	5.10%	3.5	21	$2.91	7.2	4.8%
5.0	6.2	6.2	4.2	6.4	7.7	11.1	4.85	2.7	35	6.69	5.2	8.2
14.0	9.4	6.8	10.7	–5.0	4.2	16.1	3.74	3.1	33⅝	6.85	4.9	8.0
–2.2	–15.0	–12.9	P–D	D–D	–100.0	–12.4	2.40	—	5	–1.29	def	0.0
10.7	8.0	8.4	36.1	15.4	16.8	11.7	5.54	6.4	35	5.39	6.5	5.5
–2.3	5.1	6.1	–36.6	–19.9	–10.1	7.7	3.79	29.8	30	1.01	29.7	4.0
26.1	10.9	11.2	11.6	10.7	11.3	15.4	4.81	4.0	24	5.27	4.6	6.2
13.1	7.4	3.8	–2.9	–33.8	7.8	12.4	3.72	6.4	19½	3.05	6.4	9.2
14.6	8.1	4.5	23.3	16.3	11.3	16.1	5.42	4.5	31	5.36	5.8	5.3
15.9	10.9	11.8	19.9	25.9	11.9	16.1	4.53	4.3	47⅛	7.93	5.9	5.5
13.9	9.7	7.5	14.6	3.9	12.6	14.4	5.95	4.1	27½	5.11	5.4	4.7
46.2	10.4	9.2	12.7	9.1	11.9	18.2	5.91	2.9	36¾	3.60	10.2	3.7
25.5	7.5	4.4	13.7	8.1	12.8	14.1	5.55	5.0	22	2.66	8.3	4.9
6.4	5.4	7.8	15.8	16.4	4.2	14.7	5.15	4.1	32½	6.59	4.9	7.4
16.9	11.1	11.4	15.0	11.4	14.0	16.5	5.62	3.9	48	7.21	6.7	5.3
4.7	7.7	9.1	13.6	3.3	4.2	13.4	3.88	5.5	32¼	6.87	4.7	6.5
10.4	8.3	5.4	4.5	–20.2	9.5	14.5	4.56	5.0	52⅜	5.52	9.5	4.7
22.1	12.1	12.1	15.9	6.9	18.8	16.4	5.15	3.3	30⅝	4.82	6.4	5.0
11.4	11.5	13.2	13.0	30.4	6.3	16.8	4.97	2.6	22¾	4.42	5.1	4.8
14.8	10.8	11.9	18.8	18.5	11.0	17.4	4.83	3.6	38¼	6.28	6.1	5.8
20.0	15.9	16.8	27.3	17.6	19.6	22.4	7.20	3.3	29	3.54	8.2	3.4
16.6	11.4	13.3	24.6	15.0	13.3	16.3	6.68	4.4	23¾	3.61	6.6	4.2
14.0	8.6	12.3	23.9	19.4	7.1	21.1	5.83	3.5	34½	7.74	4.5	5.4
6.3	4.5	–9.0	–19.0	–56.9	7.2	11.5	4.34	14.8	16½	1.10	15.0	6.5
5.1	9.9	4.1	–8.2	3.3	—	6.1	NC	3.4	—	—	—	—
8.5	9.4	8.3	19.3	4.0	15.2	14.7	5.81	6.3	29¾	4.46	6.7	6.7
17.7	9.2	10.0	D–P	9.2	14.4	10.4	4.40	4.2	25⅝	5.47	4.7	6.6
15.6	16.9	24.4	59.9	87.4	22.0	19.3	5.28	3.2	66½	11.75	5.7	2.6
10.7	7.5	7.3	4.8	18.1	9.7	12.2	4.10	4.5	22	4.17	5.3	7.3
6.6	5.4	7.4	10.1	36.6	1.6	12.0	5.09	5.6	34¾	6.61	5.3	5.8
20.5	9.5	9.8	11.7	10.4	11.8	16.2	6.13	5.0	25⅜	4.23	6.0	6.3
7.2	4.6	1.1	–14.3	–21.2	14.8	8.1	3.82	16.6	36½	1.79	20.4	3.3
35.5	8.4	8.7	6.0	36.3	7.2	13.8	4.68	6.8	19⅜	4.13	4.7	6.8
6.5	8.0	5.0	2.9	–16.7	9.0	13.6	4.57	4.9	30¼	3.39	8.9	6.0
8.3	10.3	9.2	15.8	7.0	12.6	15.4	6.39	5.1	31¼	5.34	5.9	6.4
48.6	6.1	2.7	12.6	14.7	8.3	14.8	6.26	2.7	30⅜	4.75	6.4	7.2
12.1	10.2	6.2	2.0	–20.4	8.6	14.5	6.27	6.3	16⅜	2.19	7.5	6.1
16.2	7.0	10.4	3.8	24.6	13.9	8.8	5.67	6.0	30½	2.28	13.4	2.9
17.9	6.0	11.1	9.8	–1.1	9.4	15.1	4.92	5.0	29	4.50	6.4	5.2
1.6	3.1	–4.2	–39.0	–88.7	2.4	9.6	5.15	41.9	30⅛	0.74	40.7	9.3
13.0	10.0	9.6	10.4	8.6	6.8	15.4	4.35	2.3	26¼	3.93	6.7	5.3
13.1	9.2	9.1	11.1	9.5	20.1	15.3	5.22	3.9	19¼	3.24	5.9	6.6
17.1	4.6	6.8	7.5	40.7	5.2	11.0	5.05	4.9	25	3.77	6.6	5.3
10.7	6.6	5.0	8.9	193.5	7.1	11.4	5.84	3.2	33½	6.37	5.3	5.5
23.3	10.6	7.8	2.9	–26.1	25.7	14.5	4.55	4.0	16⅛	1.87	8.6	4.0
18.4	3.6	–11.2	P–D	P–D	9.6	10.0	6.10	—	30½	–2.11	def	4.6
8.3	9.4	8.5	6.2	5.3	8.1	15.1	5.54	3.7	27½	4.21	6.5	6.4
10.5	7.2	7.9	10.5	9.3	2.6	13.2	5.07	5.9	19¾	3.17	6.2	6.3
10.8	8.1	4.7	–3.0	–21.8	8.3	13.6	4.75	6.2	17½	1.79	9.8	5.7
7.7	–12.4	0.9	–28.9	D–P	–100.0	–7.8	2.77	12.5	5⅜	0.54	10.0	0.0
11.4	**9.3**	**8.1**	**10.3**	**9.2**	**10.4**	**14.5**	**4.57**	**4.5**			**6.5**	**5.6**

udes leases. [6]Company not publicly traded; stock data not available [7]Bank only; not organized as a holding company [8]Bank only. [9]Includes results of nonbank ations where applicable. [10]Three-year average. P-D: profit to deficit. D-P: deficit to profit. D-D: deficit to deficit. def: deficit. NA: not available. NC: not parable. NM: not meaningful.

The 50 largest trust operations

Helped by a 19.6% rise in the Dow Jones industrials, the money managed by the trust operations below grew to $444 billion in 1982, a 17% increase over 1981. Twenty of these trust operations were able to better the DJI's performance. Among the top five, Bankers Trust moved up to the number two spot and Citicorp slipped to number five. J.P. Morgan retains first place by a healthy margin.

1982 rank	Company	Market value of trust assets[1] 1982 (millions)	% Increase over 1981	—Trust department revenues— total (thousands)	% change from 1981	% of total operating revenues
1	JP Morgan	$39,118	11.1%	$189,600	15.4%	2.8%
2	Bankers Trust	23,000E	18.0	90,546	21.2	1.9
3	PNC Financial	21,902	17.0	62,101	18.0	4.8
4	Mfrs Hanover	21,588	20.6	75,696	3.2	1.0
5	Citicorp	21,436	8.2	132,656	4.9	0.7
6	Chase Manhattan	14,957	19.4	103,162	16.4	1.0
7	Mellon National	12,949	4.7	37,009	17.5	1.6
8	Harris Bankcorp	12,853	11.0	42,140	0.6	4.6
9	Chemical New York	12,008	23.3	67,334	3.5	1.2
10	Wells Fargo	11,885	25.4	45,646	17.9	1.4
11	Continental Illinois	11,565	–7.2	60,428	12.7	1.0
12	Northern Trust	11,534	7.1	72,651	23.5	8.8
13	Wilmington Trust	10,487	23.2	14,902	0.1	7.8
14	US Trust	9,365	2.0	70,192	14.8	28.0
15	First Bank System	9,267	15.8	41,902	14.2	2.1
16	Crocker National	8,982	11.6	41,123	14.0	1.4
17	BankAmerica	8,863	–12.0	70,546	3.3	0.5
18	State Street Boston	8,856	71.4	57,997	51.4	12.4
19	InterFirst	8,500	16.4	34,000	21.4	1.4
20	First Interstate Bancorp	8,029	7.7	56,134	14.2	1.2
21	Fiduciary Trust of NY	7,489	24.8	20,903	4.3	67.7
22	First Chicago	7,488	9.8	47,564	3.8	1.1
23	Capital Guardian Trust	7,258	30.8	NA	NA	NA
24	Bank of New York	7,231	15.2	119,020	27.3	7.8
25	Girard	7,060	17.2	28,976	21.2	5.1
26	AmeriTrust	6,976	12.6	30,922	10.7	5.0
27	First National Boston	6,745	2.6	51,898	15.7	1.9
28	NBD Bancorp	6,739	8.1	28,574	–0.3	2.0
29	Centerre Bancorp	6,289	14.7	25,146	13.2	4.1
30	Northwest Bancorp	5,812	14.6	34,782	8.9	1.7
31	RepublicBank	5,729	15.8	32,097	18.2	1.7
32	Bank of New England	5,574	20.1	26,747	14.6	4.2
33	National City Corp	5,363	34.9	20,107	12.3	3.0
34	Amer Natl (Chicago)	5,212	31.3	12,732	11.7	4.0
35	First City Bancorp	5,149	10.7	22,132	23.4	1.3
36	Citizens & Sthrn Ga	4,603	34.7	12,196	14.2	1.9
37	Tex Commerce Bncshrs	4,555	24.8	22,278	28.1	1.2
38	Trust Co of the West	4,496	28.2	NA	NA	NA
39	Boatmen's Bncshrs	4,344	26.8	8,416	13.4	3.3
40	NCNB	4,236	54.5	19,244	26.4	1.8
41	Hartford National	4,186	24.4	22,613	20.0	5.8
42	Comerica	4,111	19.6	21,736	17.8	2.9
43	Manufacturers National	4,014	22.1	13,645	15.6	2.2
44	First Wisconsin	3,945	26.7	17,028	11.1	3.0
45	Irving Bank Corp	3,944[2]	—	30,179	14.7	1.3
46	Trust Co of Georgia	3,936	26.2	20,363	14.0	4.2
47	Wachovia	3,725	18.3	25,629	20.2	3.2
48	Mercantile Bancorp	3,604	15.6	13,766	10.9	2.3
49	First Pennsylvania	3,431	12.1	18,391	3.9	2.9
50	Marine Midland	3,371	19.9	23,102	9.6	1.0

[1]Accounts over which the bank exercises investment discretion. [2]Market value as of 12/31/81, latest available figure. E: Company estimate. NA: Not available.

of the money-center banks have been so strong in spite of all the scare stories in the press and on the tube about defaults on foreign loans. Citibank, for example, has almost doubled from its summer low of last year. Chemical, Manufacturers Hanover and J.P. Morgan are up almost as much. Chemical hit an alltime high this year and some of the others could easily do so if the market continues to rise.

Here is what the consensus of a group of analysts is predicting for the big New York City banks this year (net income per share before securities transactions):

Citicorp: $6.50-$6.75; up from $5.50. Consumer business is turning profitable and could contribute $150 million to earnings, more than double 1982's results.

Chemical: $9.55 to $9.70; up from $8.69. Chemical, along with J.P. Morgan, established the low point for loan losses in 1982.

J.P. Morgan: $11.30; up from $10.67.

Chase Manhattan: $11.50-$12.50; up from just under $8. A turnaround, but still facing immense problems.

Bankers Trust: $8.55 to $9; up from $8.73.

Manufacturers Hanover: $8.40; up from $7.82.

Not that the banks don't have plenty to worry about. Consider:

Deregulation of interest rates has made the business a lot tougher and more competitive. That situation is getting worse from the banks' viewpoint, not better.

While stockbrokers and others are moving into banking, the banks get a hard time when they try moving into other people's bailiwick. The banks are slowly getting their way but the question still remains: How good will bankers be at insurance? How good at stock brokerage?

The price of oil. The price of oil? What's that got to do with banking? Plenty. A total collapse of OPEC leading to $19 or $20 oil would be good for most of the American economy, but it would be a body blow to banks who have lent heavily on the expectation that the price of oil "could only go up." As the price of oil drops, the collateral becomes worth less and less. Says one West Coast lending officer: "At $25 a barrel most of our loans will be okay. But $22? Please, my nerves. At $22 a lot more of our loans will be in bad, bad trouble."

Reported earnings, quite clearly, are not what bankers have to worry most about these days.

And the band struck up, "Nearer, my God, to Thee. . . ." ■

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Wall Street thinks everything is finally coming up roses for the thrift industry after two years of travail. Don't be too sure.

Put the champagne away

The 25 largest savings and loan associations

In an effort to save or be saved, mergers were commonplace in the savings and loan industry in 1982. The 25 largest S&Ls now have assets totaling $153 billion, up from last year's $125 billion—mainly because of mergers and acquisitions. Profits are another story. Only six S&Ls were profitable.

	1982 size measures ($millions)							
Rank	Total assets	Savings accounts	Loans receivable	Investment securities	Advances from FHLB	Total revenues	Net income	Company (state)
1	$16,864	$11,815	$10,946	$1,712	$1,830	$2,015	$–44.5	HF Ahmanson (Cal)
2	12,675	9,561	10,174	1,920	1,855	1,387	–74.7	Great Western Financial (Ca
3	10,415	7,635	7,809	1,126	1,154	1,153	4.8	California Federal S&L[2] (Cal
4	9,388	6,221	8,524	507	1,144	1,009	–61.1	First Charter Financial (Cal)
5	7,869	5,952	5,710	656	1,092	779	–17.0	Glendale Federal S&L [2,3] (C
6	7,270	4,454	6,016	540	1,714	859	6.9	FN Financial Corp[4](Cal)
7	7,269	4,835	5,880	510	964	799	–19.8	Golden West Financial (Cal)
8	6,612	4,904	5,988	223	250	775	36.7	Financial Corp of America (
9	6,361	4,860	3,668	727	648	484	–107.8	Talman Home Federal S&L
10	6,112	4,514	4,651	660	1,172	668	–28.9	Home Federal S&L[2] (Cal)
11	5,943	4,675	3,730	918	621	481	–8.7	Empire of America[2] (NY)
12	5,271	3,811	4,379	470	951	549	–61.1	Imperial Corp of Amer (Cal)
13	5,235	3,281	3,885	1,100	1,030	484	–23.5	First Federal Svgs of Mich[2] (
14	4,847	2,937	3,957	449	1,193	546	–26.7	Gibraltar Financial (Cal)
15	4,528	3,386	3,607	331	427	554	13.2	City Federal S&L (NJ)
16	4,044	3,233	3,010	219	429	365	–94.2	First Fed S&L of Chicago[2,3]
17	3,888	2,661	3,416	293	491	447	–32.0	AmeriFirst Federal S&L[2] (Fl
18	3,882	2,845	3,048	259	650	418	–26.7	Great American Federal S&
19	3,748	2,724	2,782	526	428	411	–22.7	Gibraltar Savings (Tex)
20	3,629	2,932	2,601	674	340	315	8.7	Carteret S&L[2] (NJ)
21	3,573	3,171	3,110	240	159	354	–46.2	Standard Federal S&L[2,3] (Mi
22	3,543	2,516	3,022	215	672	352	–28.4	Allstate S&L[5] (Cal)
23	3,348	2,305	2,342	354	464	394	–21.4	Coast Federal S&L [2,3] (Cal)
24	3,344	2,240	1,110	466	684	308	–33.4	First Federal S&L of Roches
25	3,223	1,949	2,011	232	1,012	263	44.5	Benj Franklin Federal S&L[2]

[1]Four-year average is a compounded annual rate: 1978/82. [2]Mutual savings and loan association.
[3]Based on data from the Federal Home Loan Bank; figures are derived for the period ending June.

By Ben Weberman

SINCE THE MIDDLE of 1982, savings and loans have turned in one of the most spectacular performances of the bull market, with tock prices of S&Ls in many cases ncreasing fourfold.

It isn't hard to see why. Not for 'ears have savings and loans felt this :ind of euphoria. Billions of dollars in ıew deposits have flowed into their ıew money market deposit accounts. The spread between the cost of funds ınd the yield on loan portfolios has urned positive again after nearly two 'ears in the red. And on top of that here are healthy nonrecurring gains o be had as housing recovers: loans :arrying generous fees up front that :an be counted in current net income.

Buoyed by this glittering vista, hrifts are raising big money from the ›ublic, a good deal of it from mutual ›avings associations converting to stock associations. Robert Chaut, analyst with A.G. Becker, has been tracking S&L conversions since they were first permitted in 1975. From that year until this January, Chaut says, about 129 thrifts went public, raising about $675 million. In the current enthusiasm, Chaut thinks the thrifts will raise more than $1 billion in public offerings this year. About half of that will come from two big conversions, by California Federal and Home Federal of San Diego.

Nor do the ambitions of S&Ls end at public offerings. They are eyeing the markets of the commercial banks. For example, Gibraltar Financial of California is putting together a credit department to solicit small and medium-size business loans. Gibraltar also opened a broker/dealer affiliate.

Is everything coming up roses at last? Maybe. But remember that most of that new money raised from the public is not going for expansion but for rescue operations. The fact is, the optimists failed to reckon with the huge mortgage delinquencies and defaults that have shown up this year. In February, for example, mortgage defaults set an alltime record, and March was running in the same direction. Those loans are mainly ones carrying 16% and 17% rates on homes purchased within the past year or so at highly inflated prices. Also in trouble are a lot of the famed "creative financing" devices fashioned in the desperate 1970s.

Take $6 billion (assets) Home Federal Savings & Loan Association of San Diego, tenth largest in the country. Home Federal's net income had been running about $40 million a year until the disastrous years 1981 and 1982, when it lost nearly $49 million.

But during the final four months of last year, Home Federal's earnings abruptly turned up. A good part of it was the improved net interest spread. But

Growth measures[1]							Dec. 31, 1982		
Assets	Savings		Revenues		Net income		Yield on earning assets	Cost of funds	Spread
1982 vs 1981	4-year average	1982 vs 1981	4-year average	1982 vs 1981	4-year average	1982 vs 1981			
12.1%	9.0%	6.8%	18.4%	28.8%	P–D	D–D	11.49%	10.12%	1.37%
0.8	4.7	2.7	13.0	0.4	P–D	D–D	11.07	10.38	0.69
37.1	16.4	46.8	26.2	61.3	–44.3%	D–P	12.50	10.65	1.85
–3.7	0.1	–2.3	9.1	0.6	P–D	D–D	10.34	10.31	0.03
50.1	20.4	48.6	29.3	38.7	P–D	P–D	NA	NA	NA
3.6	21.1	–4.4	39.6	71.8	–29.9	–40.1%	10.98	10.21	0.77
31.2	19.0	60.0	31.8	28.1	P–D	D–D	12.10	10.70	1.40
76.0	71.6	78.5	80.6	99.8	50.5	106.0	13.59	11.80	1.79
72.7	31.7	77.1	33.1	47.1	P–D	D–D	NA	NA	NA
20.7	18.3	35.7	23.2	17.8	P–D	D–D	12.32	11.20	1.12
109.3	28.1	95.8	35.6	95.0	P–D	D–D	11.36	11.03	0.33
2.0	8.4	4.6	15.3	8.8	P–D	D–D	11.07	10.88	0.19
31.6	1.6	2.2	10.1	22.2	P–D	D–D	10.65	10.13	0.52
1.6	2.8	12.8	19.7	12.7	P–D	D–D	11.31	10.50	0.81
35.3	29.3	40.9	46.1	68.6	9.9	D–P	13.05	11.53	1.52
11.9	13.6	14.5	20.1	7.5	P–D	D–D	NA	NA	NA
16.1	9.0	4.8	26.6	25.5	P–D	P–D	NA	NA	NA
41.2	22.6	48.6	32.6	42.7	P–D	P–D	NA	NA	NA
11.4	12.1	8.5	24.5	14.6	P–D	P–D	11.99	12.84	–0.85
88.0	33.3	93.5	39.6	63.0	14.9	D–P	12.10	10.73	1.37
4.9	11.1	7.1	20.5	9.8	P–D	D–D	NA	NA	NA
8.6	5.9	10.9	14.8	7.7	P–D	D–D	10.99	10.26	0.73
8.3	7.3	7.6	21.3	24.7	P–D	D–D	NA	NA	NA
179.8	26.1	126.5	37.7	186.0	D–D	D–D	NA	NA	NA
183.5	24.0	129.9	31.6	160.6	41.1	D–P	13.24	11.59	1.65

y of National Steel. [5]Subsidiary of Sears, Roebuck NA: not available P–D: profit to deficit. D–D: deficit to deficit D–P: deficit to profit.

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much of it also came from upfront points on new mortgages or the application of book benefits from purchase accounting methods on the acquisition of ailing S&Ls. Without the mergers, in fact, Home Federal's interest spread would have been a negative 0.25% rather than a positive 0.34% in 1982.

Despite the improved earnings, Home is far from out of the woods. In its most recent reporting period, 1% of its mortgage portfolio was one month late in payments, 0.27% was two months behind and 1.9% was behind by three months or longer. Of $109 million in slow loans, more than half consisted of residential mortgages and about one-quarter was on commercial properties.

Moreover, Home's ratio of "scheduled items" (like slow loans and real estate owned due to foreclosure) to assets was over 2.2%—close to the danger zone of 2.5% set by the Federal Home Loan Bank Board. If the ratio reached 2.5%, the government agency could order the thrift to draw in loans from outside parties for its subsidiaries, a costly move. In addition to seeking external, expensive financing, the association could be forced to sell off some of the scheduled items at a deep discount from book carrying cost.

The thrifts' ambitions to invade commercial banking may put them up against their bigger rivals in a way that highlights their longtime disadvantages.

What about the thrifts' ambitions to invade commercial banking? In effect, it may put them up against their bigger rivals in a way that highlights their longtime disadvantages. Some bankers contend that the thrifts lack the experience in credit evaluation—let alone the cash—to attract top-dollar lending officers.

With all these problems remaining, why is mighty Citicorp acquiring ailing Fidelity Savings & Loan of Oakland, Calif.? Not because it is dying to get into the S&L business, but because it wants a tap into the rich California consumer market from which it is barred by law as Citibank. Today, Citicorp's worldwide consumer loans total more than $23 billion, up from $18 billion a year ago, and account for 27% of total assets. Citibank wants even more consumer loans and apparently views the S&Ls more as an additional entry point than as an acquisition of a going business.■

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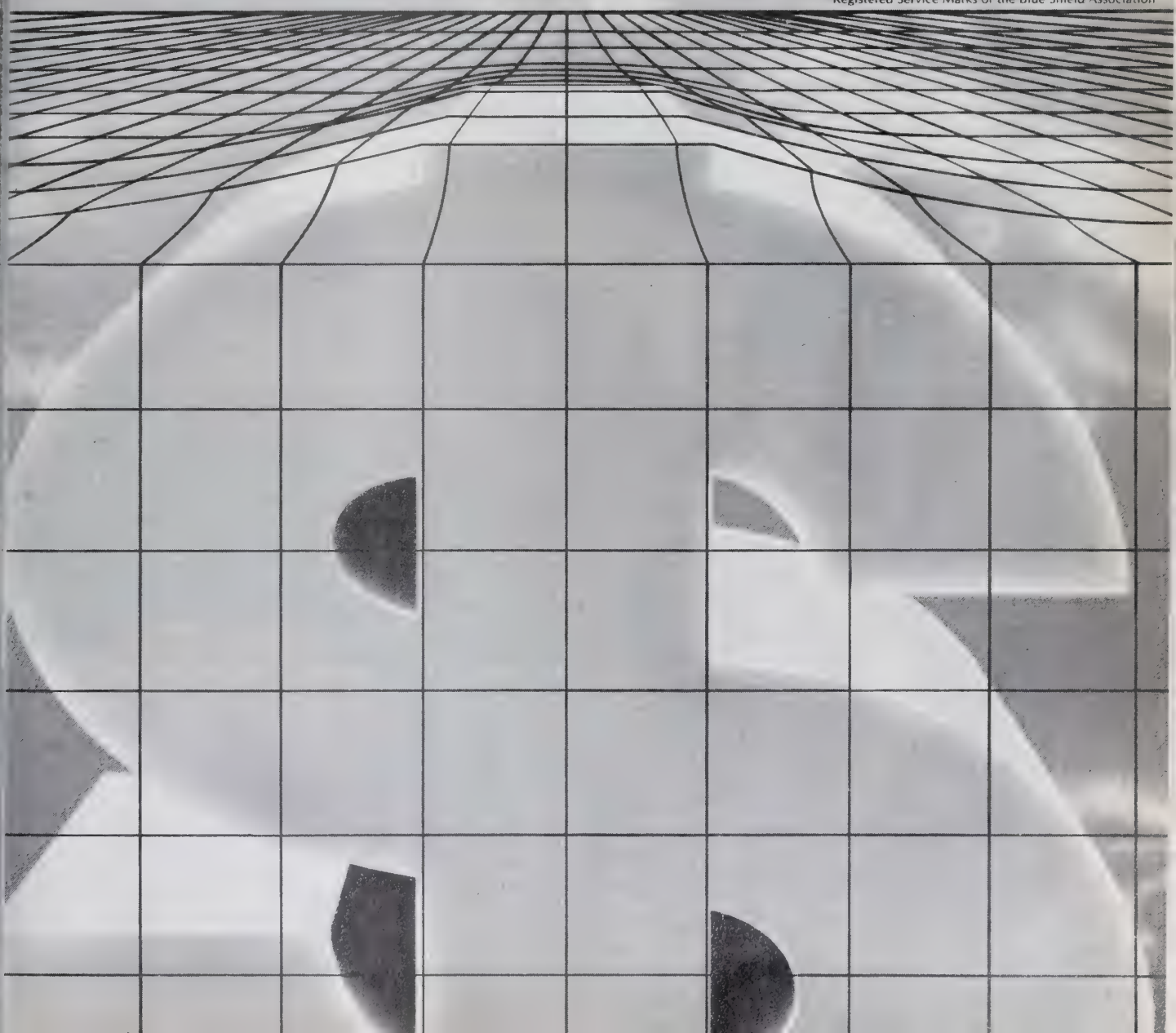
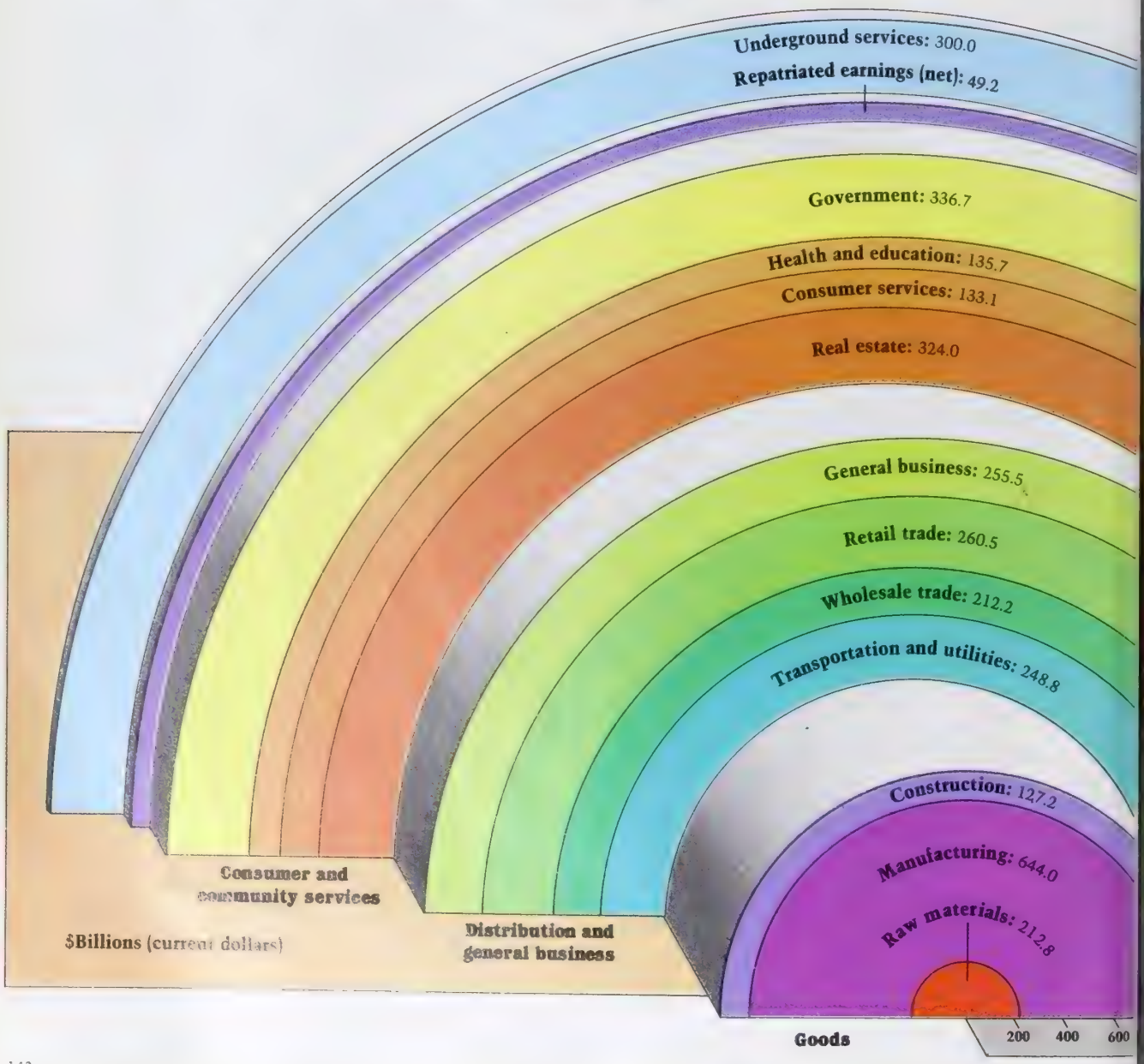


"Reindustrialization" makes about as much sense as an antidote to our current economic woes as back-to-the-land does as a cure for our long-term agricultural problems.

You mean we've been speaking prose all these years?



By James Cook

"GOOD HEAVENS!" M. Jourdain exclaimed in Molière's *Le Bourgeois Gentilhomme.* "For more than 40 years I have been speaking prose without knowing it?"

You could say much the same thing about those who worry about the consequences of the U.S.' becoming a service economy: It has been predominantly a service economy for at least 40 years.

Last year, for example, services generated 67% of the U.S. gross national product and employed seven out of every ten Americans with jobs. While manufacturing employment has remained steady at around 25 million for a decade now, services have gone from 47 million to 65 million, and the trend is certain to continue—especially after last year's slump.

Not since World War II has the goods-producing sector of the economy come even close to providing as much as 50% of U.S. employment. Even if you count transportation and utilities as "goods," we have been chiefly a service economy since 1950. The production of goods—raw materials, manufactures and construction—is no longer the prime mover of the U.S. economy. The factory has given way to the office, the smokestack to the skyscraper.

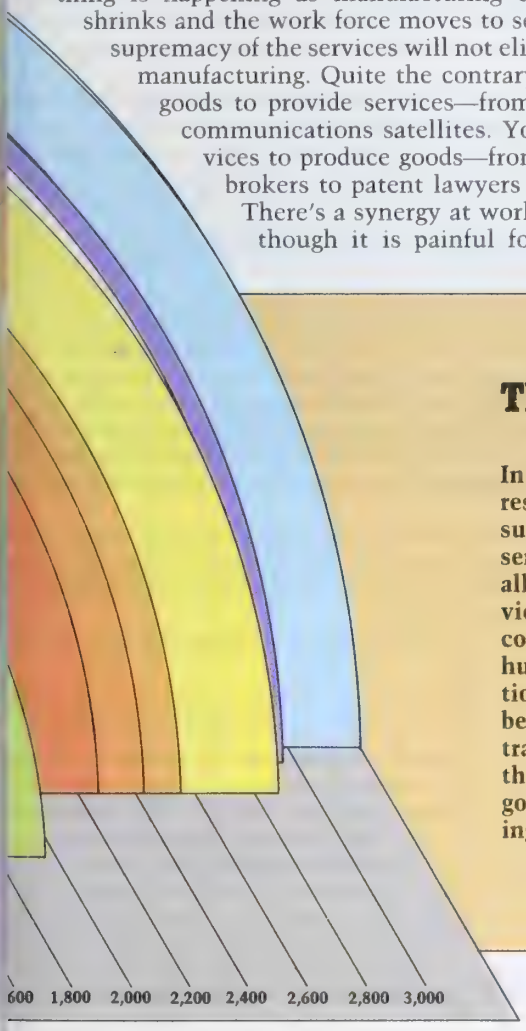
Does this mean that we will become a nation of clerks? That we will come to depend on other nations for our manufactured goods? Certainly not. The eminent British economist Colin Clark saw the change as an inevitable progression in economic development. As an economy evolves, the work force shifts from one segment of the economy to another. Agriculture doesn't die, but much of its work force shifts into manufacturing. Now the same thing is happening as manufacturing employment shrinks and the work force moves to services. The supremacy of the services will not eliminate U.S. manufacturing. Quite the contrary. You need goods to provide services—from railcars to communications satellites. You need services to produce goods—from insurance brokers to patent lawyers to retailers. There's a synergy at work here, even though it is painful for people in traditional industries who are displaced by the change.

In the U.S. the manufacturing economy enveloped the old agricultural economy and transformed it. With the introduction of fertilizers, pesticides and large-scale mechanization, U.S. agriculture was industrialized, just as manufacturing had been, and became the most productive in the world. Today the U.S.' 2.4 million farmers grow 170% more agricultural products than 7 million farmers did 50 years ago.

Almost precisely the same process has been under way as the services envelop the old manufacturing economy. Manufacturing is being transformed by the new electronic information-processing technologies. The importance of materials is being minimized. We are at a stage where it requires fewer and fewer human beings to produce a given volume of manufactured goods. The demand for manufactured goods is not shrinking: Only the labor and materials input is shrinking. It is thus clear that most of the breast-beating about our industrial decline is a kind of masochism—much like the hysteria in 18th-century Britain that building roads fit for stagecoaches would weaken the national fiber and lead to a decline in equestrian skills. A more proper worry, as management theorist Peter F. Drucker has pointed out, is whether, in the aftermath of change, the U.S. manufacturing economy will remain the world's most productive, as its agricultural economy continues to be. "Instead of ringing in the decline of our economic power," says Ronald K. Shelp, "a service-driven economy signals the most advanced stage of economic development." Shelp is an American International Group vice president and author of a book on the international services, *Beyond Industrialization: Ascendancy of the Global Service Economy* (FORBES, *Aug. 30, 1982*).

But politicians and economists, no less than businessmen, are frightened by change. "I think we're in trouble," one mining company executive said a while back, "if we lose the wealth-producing segments of our economy."

Wealth-producing? Communications, transportation, food preparation, vacations, entertainment, information. Are these services not wealth-producing? And what is a manufactured good but a service in packaged form? An automobile, a Boeing 747 are useful only for the services



The economic universe

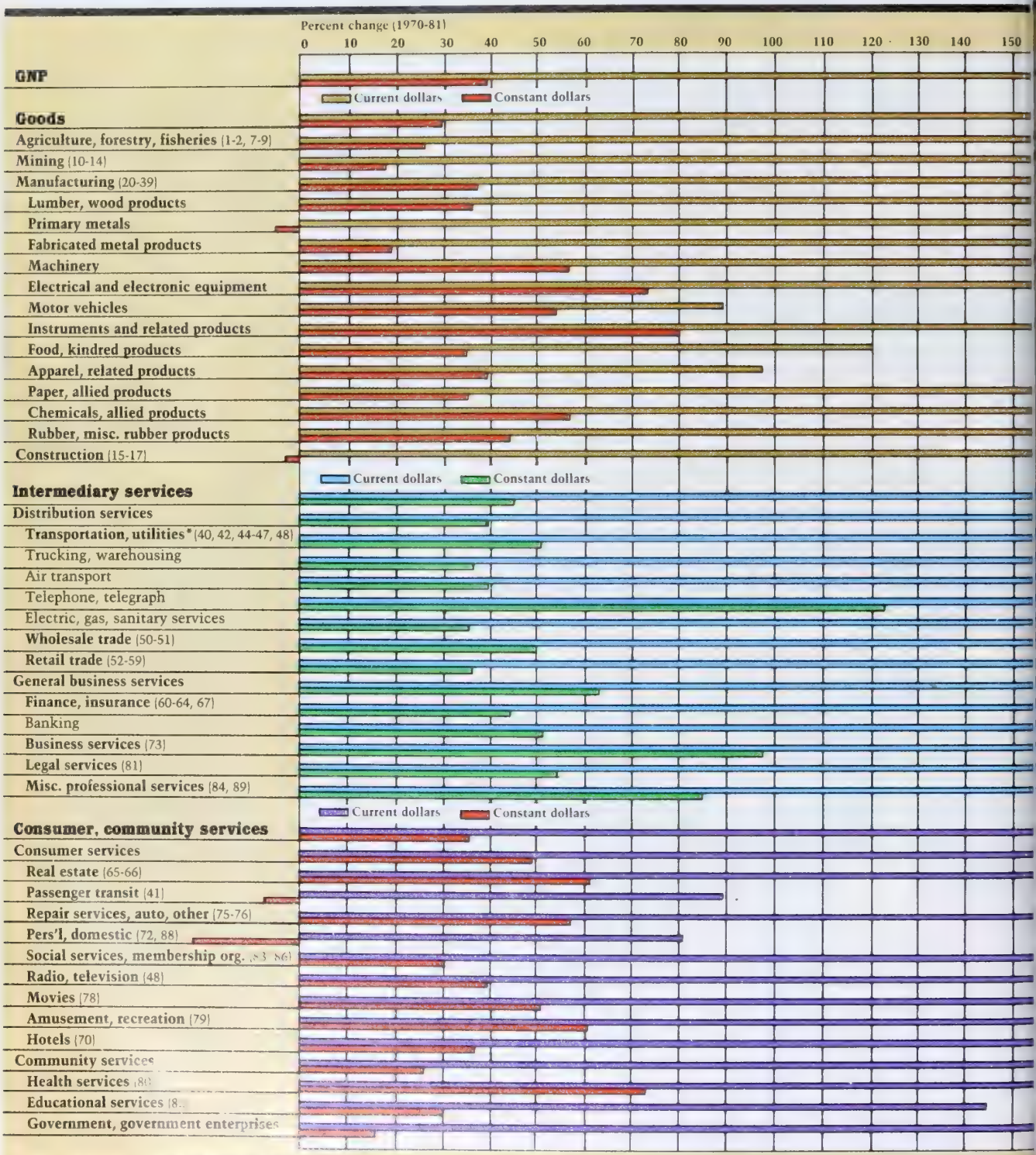
In the traditional view, the goods-producing industries rest at the center of the U.S. gross national product, like the sun at the center of the solar system, with ancillary services revolving around them. Certainly the economy *is* all of a piece. The distribution and general business services extend the manufacturing economy's reach, while the consumer and community services provide the social and human organization without which no economy can function. But the distinction between goods and services has become increasingly blurred. Many of the services—from transportation to television—can be provided only through the medium of goods, while the service content of goods production—from accounting and law to engineering and research—has been expanding steadily.

that they actually provide.

In the end, the wealth-producing forces of any economy are its immaterial resources—not oil or gas, copper or iron ore, but rather the intellectual and organizational skills that are the very core of the services. It's no accident that resource-poor island nations like Britain and Japan at various times have become world economic and political powers. Or that postwar Germany and Japan were able to rebuild their broken economies in less than a decade. As Andrew Carnegie once put it: "Take away our factories, take away our trade, our avenues of transportation, our money. Leave us nothing but our organization, and in four years we shall have reestablished ourselves." Carnegie understood how the world works better than most of today's doomsayers.

Services—To union leaders the term conjures up minimum-wage jobs dishing out hamburgers. They forget the computer systems analysts, brain surgeons, bureaucrats. Everyone talks as if the services were a single phenomenon, and they're not. Some are capital-intensive—like electric power. Some are not—like advertising or consulting. Some are labor-intensive—like auto repair. Some are not—like natural gas transmission.

To a large extent, the proliferation of services reflects

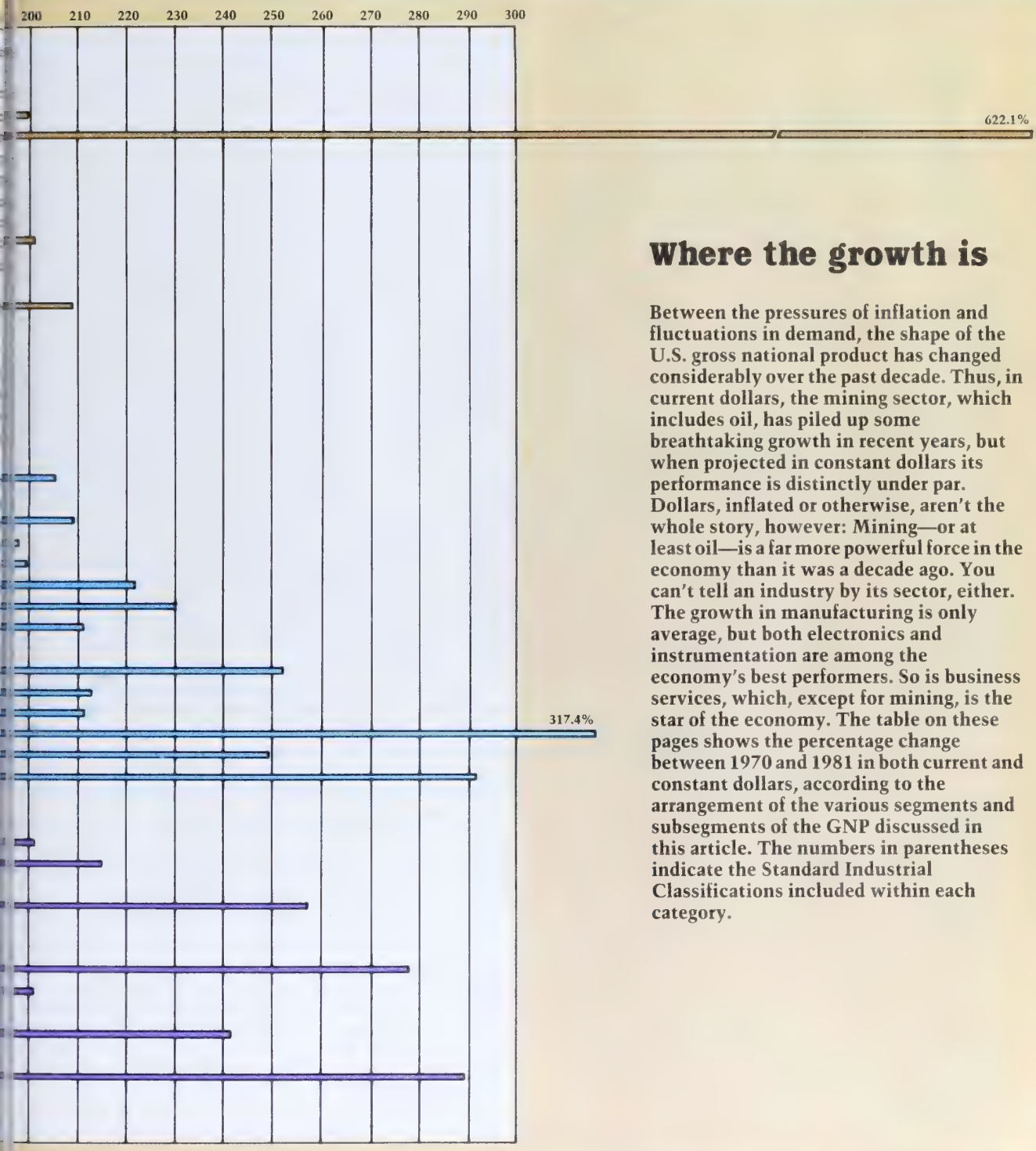


*Excludes passenger transit

the continuing division of labor that has been under way since the Industrial Revolution—a process whose implications FORBES detailed some years ago in "The Great Hamburger Paradox" *(Sept. 15, 1977)*. As an economy develops, specialized functions inevitably emerge. One man shoes horses, another peddles housewares, still another lends money. In an industrialized economy, specialized firms wind up supplying services more cheaply and more efficiently than the manufacturers can themselves—you name it: advertising, construction, testing, research. To lament this trend is to lament human progress. Did society lose something when a nation of yeoman farmers was transformed into a nation of city dwellers? Yes, but it gained more in health, nutrition, culture and leisure.

Goods versus services? In a real economy, the elements are interdependent and mutually supportive.

As the economy has evolved, the services have grown more and more important. Expand your manufacturing business, from a local to a regional market, from a national to an international market, and services like transportation and communications are likely to expand disproportionately. The business becomes more service- and less manufacturing-oriented. A simple business becomes more complex, requiring a far larger service element: finance



Where the growth is

Between the pressures of inflation and fluctuations in demand, the shape of the U.S. gross national product has changed considerably over the past decade. Thus, in current dollars, the mining sector, which includes oil, has piled up some breathtaking growth in recent years, but when projected in constant dollars its performance is distinctly under par. Dollars, inflated or otherwise, aren't the whole story, however: Mining—or at least oil—is a far more powerful force in the economy than it was a decade ago. You can't tell an industry by its sector, either. The growth in manufacturing is only average, but both electronics and instrumentation are among the economy's best performers. So is business services, which, except for mining, is the star of the economy. The table on these pages shows the percentage change between 1970 and 1981 in both current and constant dollars, according to the arrangement of the various segments and subsegments of the GNP discussed in this article. The numbers in parentheses indicate the Standard Industrial Classifications included within each category.

and insurance, law, accounting, advertising, public relations, data processing, equipment rental, management consulting. Even the wide-ranging community services play a role: the nonprofit health and educational services and government itself, which, along with everything else, provides for the common defense and ensures the domestic tranquility without which no economy can function.

Services unproductive? Far from it. Synergistic is more like it. Two plus two making ten. Economist Simon Kuznets has described how the development of transportation, financial and communications services made possible large productivity gains in geographically specialized large-scale agriculture and manufacturing. Meaning? Meaning that you can feed New York from Iowa and supply Iowa's entertainment needs from New York. Remember "Prices slightly higher in the West"? The end of that label was symptomatic of what had been accomplished. Imagine trying to get a breakfast food or a detergent to market without advertising, a tractor into international trade without insurance or a high-technology company into business without bankers, accountants and lawyers. You might as well try to sell autos or housing without credit.

The line blurs between goods and services. Ten percent of the agricultural sector of the GNP is already generated by service activities: soil preparation, veterinary and forest services, for example. Services probably account for 20% or more of minerals and mining: coal mining, oil and gas drilling and exploration services. The service elements even within manufacturing have been growing. In 1950 production workers comprised 82% of the manufacturing work force. By 1980 the number had dropped to 70%.

The services are no longer merely the passive instruments of the manufacturing economy. They are productive in their own right and a source of strength to manufacturing.

In one sense, manufacturing has also unquestionably powered the growth of services. As New York University service economist Thomas Stanback points out, the really dynamic sectors of the service economy have been those that also depend heavily on manufacturing: the distribution and general business services *(see chart, pp. 144, 145)*.

Is it surprising, really, that U.S. society is increasing its use of services faster than its use of things? There's a limit to how many cars a customer can use, how much he can eat or drink or smoke. But his appetite for services is almost infinite. Among the services in present-day demand are those that cater to humanity's sense of its social responsibilities: environmental protection, social security, health and welfare.

Those who fear the growth of services as a threat to blue-collar prosperity would do well to remember this: Many of the poorest paying and most personally demeaning forms of service have been shrinking in their relative importance. Remember the live-in housemaid, that standby of the middle-class home of a generation or two ago? Remember the low-paid handyman? To satisfy needs for this kind of service we've substituted things for people—automatic washers and dishwashers, safety razors and hair driers, lawn mowers and snow blowers, disposable diapers.

In the early Sixties, women began moving into the labor force in large numbers for the first time and, as a result, transferred all sorts of private functions into the market economy. Day-care centers multiplied, and so did the demand for fast foods and fast-food restaurants, laundromats and dry cleaning establishments. In a very real sense we not only began taking in each other's laundry but also began doing each other's cooking. Did the service industries grow? They sure did. But so did human satisfaction.

Such changes also produced a considerable expansion in the so-called underground economy, estimated by some observers to run upwards of $300 billion, to more than 10% of the GNP. Most of that $300 billion is in services. Tax-free cash payments housewives make to part-time housekeepers, cleaning women or baby sitters. Tax-free cash payments made to an army of repairmen, consultants, entertainers and professional chiselers. Tax-free exchanges made in a whole range of illegal services created by legislative folly—the old underground services like prostitution and gambling, the new ones like loansharking and drug distribution. Drugs, in fact, cocaine and marijuana in particular, is one of America's biggest growth businesses, sopping up as much as 3% of the GNP.

So, what's all the screaming about? Well, unemployment and declining communities make good newspaper and TV copy; good news never sells as well as bad news. What has caused an unacceptable degree of human suffering is the occurrence of a severe recession on top of these truly long-range changes. This has led to tremendous confusion, as these different factors—the short-term and the long-term—combined to produce a serious depression in the old manufacturing industries while leaving many service industries unscathed. What few seem to have paid much attention to is this fortunate fact: The services have emerged as a self-sustaining and productive activity in themselves, capable of sustaining both the economy and the work force at a remarkably high level. Isn't it remarkable that while unemployment rose to nearly 11% of the labor force, the total number of people employed dropped by only 2%. This is one of the favorable trends that emerged during the recession now ending.

Services are inherently more recession-resistant than manufactures. You produce and consume a service more or less instantaneously, so you can't build up inventories and live off them. Production is a lot more stable, and so is employment. If business is bad, real estate offices don't shut down, though commissions may drop. Restaurants keep running pretty much with full staffs, and so do barber shops, laundries and beauty parlors—though tips may fall off. Hospitals keep running full out, and so do law offices and, usually, government. In real estate, insurance, the security business and accounting, for example, profit-sharing may drop, but hardly anyone is out of work. The self-employed—who account for 9% of the work force—remain self-employed.

And yet the Cassandras still wail. "We can't live by taking in each other's washing" is the way half the world puts the problem. But metaphorically that's all an economy ever does: exchange one set of things people value for some other. "The purpose of production is to add to people's utility," says Victor R. Fuchs, the Stanford University economist who a decade or so ago wrote the pioneering book *The Service Economy*, "and if people want their hair cut or false teeth, that's as much production as making cars." An economy gains nothing if it produces widgets that pile up unsold while there is an acute shortage of, say, hairdressers. Yet that is what happens in "planned" economies like the U.S.S.R.

Part of the problem, Fuchs argues, is that people accustomed to manufacturing industries don't understand the services. In services, what you produce doesn't result in

easily quantifiable units of output, and quality often matters as much as quantity. Body counts were never much of an output measurement in Vietnam. How many patients a doctor sees in a day tells you little about how productive he is; what matters is how much pain he alleviates and how many lives he saves. What matters—in accounting or advertising or law, laboratory testing, computer programming or entertainment—is the effectiveness of whatever is done. Says Fuchs: "If we'd measured Detroit's productivity in terms of quality rather than units of output, the auto industry might not be in the position it's in today."

Anyone who has ever run a business knows full well that the productivity factor in services is at least as uncertain as in manufacturing. Surly sales help are unproductive; eager, friendly ones are highly productive. It's why one army will fight better than another even when the two are equal in equipment and manpower. Listen to Albert Tahmoush, chairman of Frank B. Hall & Co., the big insurance brokerage firm. "Managing highly entrepreneurial people is an art, and your whole basis of profit and loss is completely contingent on that—what your compensation systems are. You've got to train people and motivate them, and with us it's 100% of our operation." So a good 15% of Hall's 7,000 employees are motivated to earn more than $50,000 a year, but for every dollar they make, Tahmoush explains, the company makes four.

We are also learning that scale and systems are as productive in services as in manufacturing. "More and more services," says Stanback, "are beginning to be organized in the same way that manufacturing is, and, as a result, larger corporations have come into the picture and learned to operate efficiently." In the factory, economies of scale come from producing hundreds of thousands of standardized units. In services, the standardized units aren't there, so you get your scale economies by forming dozens of individual units into chains and providing centralized functions, often by computer, from a head office—inventory controls, purchasing, advertising, promotion and so on—standardizing the production of the units, that is, rather than the units themselves. That's the pattern adopted by most of the big service chains: hotels and restaurants, car rental agencies, movie theaters, real estate brokers, funeral parlors—Hertz and McDonald's, Hilton and Midas, Century 21 and SCA Services.

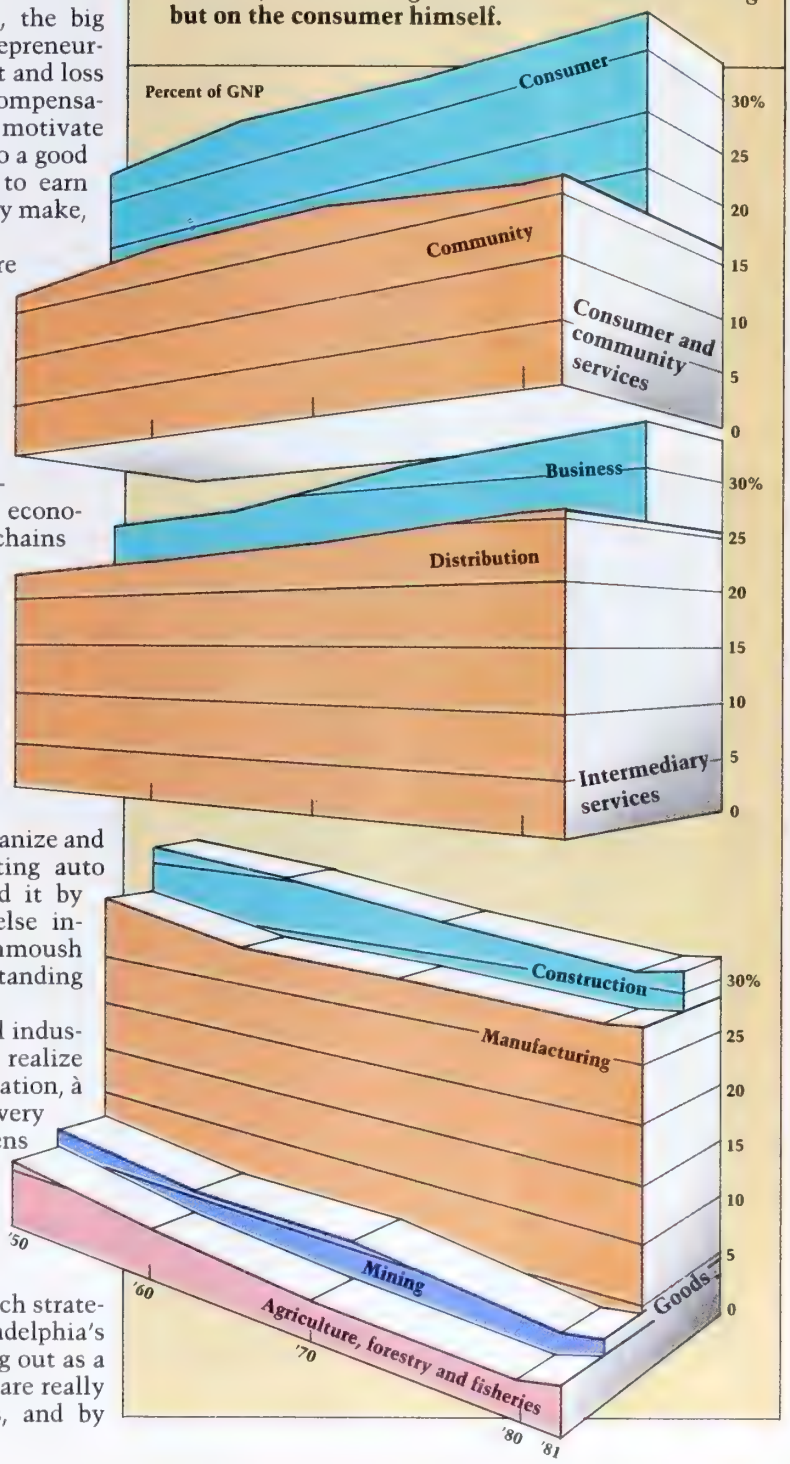
The really big gains come from the way you organize and manage the work. Henry Ford did it by putting auto production on an assembly line. Ray Kroc did it by standardizing the hamburger and everything else involved in getting it to the customer. Albert Tahmoush and other great people-managers do it by understanding the art of motivation.

Looking back it seems obvious, but it took real industrial genius for Ray Kroc to see that you could realize vast economies of scale by organizing food preparation, à la McDonald's. It was done by standardizing every element that went into the system—from ovens and deep fry pans to service counters and disposal bins—and in the process breaking down the work involved in such a way that it could be performed by low-cost workers without any special skills.

Nobody has been more skillful at exploiting such strategies than William S. Fishman, chairman of Philadelphia's ARA Services. ARA had the advantage of starting out as a vending machine company. "Vending machines are really a form of service automation," Fishman says, and by

Three in one

The manufacturing share of GNP has remained remarkably steady over the last three decades, and so, at the opposite end of the spectrum, have the government and consumer services. Overall, however, the goods sector has fairly steadily declined, thanks to the declining importance of raw materials and construction. The result is that goods now provide only a third of the GNP. Another third comes from various intermediary or amphoteric services—general business and distribution services, which depend very nearly as much on the consumer as they do on manufacturing. The remaining third comes from the consumer and community services, whose strength rests not on manufacturing but on the consumer himself.



automating its food services, ARA was able to boost productivity significantly. "We cut the time it takes to deliver a cup of coffee from 14 seconds to 6 or 7," Fishman says, "and as a result, we could double the turnover during the coffee break.

"What we've discovered," Fishman goes on, "is that the techniques of food service are transferable to other kinds of personal or consumer services." The list is long. Hospital food service led ARA step by step on into hospital housekeeping, laundry and maintenance services. In-flight food services led it into baggage handling, aircraft maintenance and security services. The skills acquired in running trucks for its vending machine business led ARA into school busing. ARA's experience in running nursing homes led it into operating day-care centers.

At the moment, the services seem poised to make a major advance in productivity, thanks to the increasing spread of the new information-processing technology. The effect on services like banking, insurance and retailing has already been considerable, and it's just getting under way. One sign is those scanning devices popping up everywhere at supermarket checkout counters, devices that record the sale and can be used to keep inventories current. The technology is moving rapidly wherever inventory control really matters—in everything from auto-parts distribution to wholesale trade.

"A wholesaler can update his price list the instant a supplier decides to increase his prices," says William Davidow, senior vice president at Intel, the microprocessing pioneer. "And the result is that the whole distribution system becomes more efficient and more profitably managed."

Davidow points to one supermarket chain that kept all its inventories online. It discovered one day that it had only two days' supply of peanut butter in stock and no hope of getting more inside of a week. Solution? It decided to jack up its prices and so keep supply and demand profitably in balance. Davidow says: "Having the information available enabled them to implement a business strategy of tremendous value."

Some of the most striking gains could come from the tens of thousands of smaller service businesses. For the first time, such companies are gaining access to the sophisticated management skills they need to manage their businesses effectively. Outside firms sell the services that enable them to manage cash flow, accounts receivable, business planning, budgets, regular financial and statistical information and so on. In the old days, companies had to become big in order to gain access to such information. Information-processing technology has changed all that. "Information processing," says Intel's Davidow, "is going to produce economies of scale in many service industries. The question is whether you are a large enough insurance or real estate broker to be able to afford the system." For many small service men, the answer is probably not. Hence, large outfits are beginning to take over insurance brokerage just as big computerized personal real estate combines like Trans World Corp.'s Century 21 and ERA are also taking bigger and bigger pieces of the real estate business.

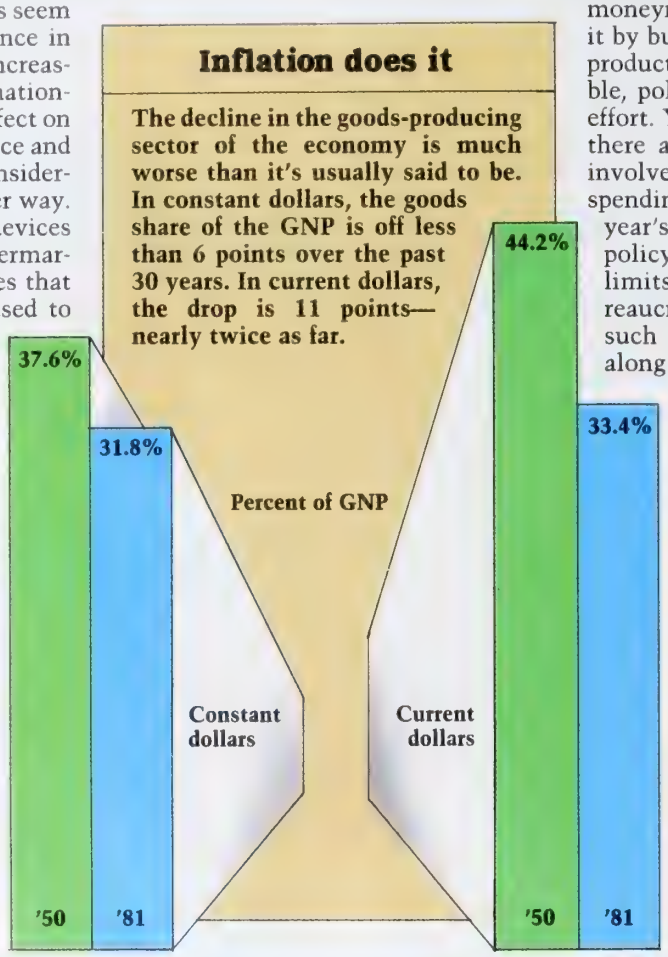
There may be huge political implications in all this. Lacking the discipline of either the market or the profit system, government productivity is likely to remain low. Says Intel's thoughtful Gordon Moore: "I don't know what a government bureaucracy does to increase its efficiency dramatically. They can't get rid of people, so they have to make the job bigger."

Bureaucrats can't demonstrate their effectiveness as moneymakers, so they demonstrate it by building an empire, and where productivity gains might be possible, politics constantly thwarts the effort. You can't cut the work force, there are too many constituencies involved, and you can't cut your spending without jeopardizing next year's budget appropriation. Public policy can, of course, arbitrarily set limits on costs and force the bureaucracy to get by with less. But such cutbacks tend to be made along the path of least resistance and don't necessarily do much for productivity.

All this lends force to those who, like President Reagan, want to cut down the size of government and return some of its functions to the private market. Luckily, government's direct share of the real GNP has been shrinking for more than a decade and will continue to narrow in the Eighties as school enrollments drop off as the baby boom tails off.

The entry of private profit-making firms into community-service areas formerly reserved for government—garbage collection, education, law enforcement and health care—may offer the best hope of disciplining costs. Some 300 government-owned or nonprofit hospitals are already contracting their management out to private firms. For-profit health care is no model of productivity either; its economies come from the formation of chains and the centralization of functions—finance, purchasing, accounting. Yet such organization is enough more efficient to cover both taxes and a hefty return on investment. Hence the hospital chains have turned into some of the most dazzling growth companies in U.S. business, with outfits like Humana, Hospital Corp. of America and National Medical Enterprises piling up records that most of the high-flying technology companies would envy.

For 200 years now, the industrial world has balanced productivity and employment by paying more for less work—confounding both Karl Marx and the machine-smashing Luddites. There is absolutely no reason to be-



ve things will be much different in the future, when anufacturing can be expected to employ as few people as riculture does now.

What the recession has made clear is that the services are longer merely the passive instruments of the manufacring economy. They are not only productive in their own ght, but the source of much of the strength of the manucturing economy. Far from filling the parasitic role econoists from Adam Smith to Karl Marx have assigned to em, the services stimulate the demand for goods and draw e economy forward like Dr. Dolittle's Pushmi-Pullyu. ou buy an auto because GMAC or Beneficial will extend e credit on favorable terms. You buy a Chrysler instead of Volkswagen, or a Toyota rather than either, because you n count on the local repair and maintenance services. In e end, a product is not a product; it is a service.

The same principle applies to industry itself. It's obvis the transportation and communications services alone nerate a heavy demand for all sorts of manufactured ods—from rail cars and highway trucks to power plants d communications cable. Equally important, an Internaonal Trade Commission study last fall indicated as much $48 billion, or close to 25% of the U.S.' 1982 merchanse exports, may have been generated by demand from .S. service businesses overseas. This would include office rniture and computers, bulldozers and airline reservaons equipment, food provisions and hospital supplies. .S. companies are inclined to order equipment that's miliar to them, whether it's a U.S. hospital management mpany, a U.S. engineering and construction company or en a U.S. insurance company specifying U.S. goods in riting a policy. Less directly, U.S. motion pictures and levision have been promoting U.S. goods worldwide for nerations, and they still do, as the anti-American Mitrrand government bitterly complained at February's Par Conference on culture.

There's no doubt that the services play a major role in suring the U.S.' position in world trade. Instead of folwing the flag, trade now follows the likes of Bechtel, uor and Morrison-Knudsen. In most years out of the last n—1982 was one exception—services helped keep the .S.' overall balance of payments in surplus.

Instead, then, of following the Pied Piper of "reindusialization," the U.S. should be concentrating its efforts n strengthening the services. Tax policy provides incenves for manufacturing—investment tax credits and dereciation allowances, for instance, but it offers virtually othing comparable to the services, not even writeoffs for search and development expenses. U.S. export promoon and finance policies are similarly biased toward manfacturing and agriculture. Instead of badgering the Japaese about beef and oranges, the U.S. might better concenate on services that involve many more American jobs.

None of this means that the U.S. will not in the future ake steel and autos or mine copper or coal. Not at all: A 5% shrinkage in the agricultural work force did not make e U.S. dependent on foreign meat and grain. It suggests, owever, that most American capital and management ould be better invested in newer, service-directed indusies, and a partial dependence on imports would not hurt ur economy. In short, mindless reindustrialization isn't e way to go.

If we do right by our growth industries, we may well end p doing right by the traditional manufacturing industries s well. To paraphrase Molière's M. Jourdain: "You mean e U.S. has been a service economy all these years and I idn't even know it?" That's right, you didn't. And neier, unfortunately, did most of our politicians and busiessmen and liberal economists. ■

They have seen the future

Aware of the power of the new electronic technologies, most people today have an intense sense of "tomorrow"—and not a little anxiety about it. Tomorrow seems almost here, but it's not at all clear how pleasant most people will find it. The new technologies may be dazzling, but are they leading us toward a heaven on earth or a hell?

Men have been erecting ideas of justice or order or peace or freedom—building utopias—at least since the moment God drove Adam and Eve eastward from Eden lest they eat of the tree of life and live forever. The Biblical Paradise, the Platonic Republic, the Augustinian City of God, the Marx-

Eden, man's first vision of utopia

More

ian classless society—the visions have changed as human life and human possibilities have changed. But the most enduring visions all bear something of the same heart-stopping vision that moved John in the Apocalypse:

"And I saw a new heaven and a new earth. . . . And I heard a great voice out of heaven saying, 'Behold, the tabernacle of God is with men . . . and there shall be no more death, neither sorrow, nor crying, neither shall there be any more pain, for the former things are passed away.' And he that sat upon the throne said, 'Behold, I make all things new.' "

Below, some notable visions past of utopias to come.

Sir Thomas More
Utopia
1516

The term "utopia" was coined by Thomas More—punning on the Greek for "no place" and "good place"—in his account of an island discovered by shipwrecked sailors. Poverty and injustice no longer exist. All adults work six hours a day for the common good, and all children receive schooling. There is no money or private wealth—iron is valued more than gold—and all citizens are treated equally and elect their political and religious leaders by vote.

To modern temperaments, More's utopia seems a highly regulated society, just as Plato's Republic does. Complete religious freedom prevails, but not for those who deny Providence and the immortality of the soul. It is puritanical—"no wine-taverns, no ale houses, no brothels, no opportunities for seduction, no secret meeting places. Everyone has his eye on you. . . ." The chief pleasures are good behavior and a clear conscience.

Bacon

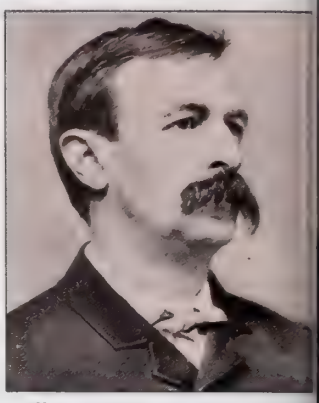
More wrote *Utopia* partly as a critique of the repressive institutions of his time. The work caused an uproar in the Church and helped feed the religious unrest that was soon to ignite in the Reformation. A considerable irony, that, since More, who became Lord Chancellor of England, was later executed by Henry VIII for defending the Church against the state.

Sir Francis Bacon
New Atlantis
1627

Francis Bacon's *New Atlantis*, published a century after *Utopia*, reflects the dawning of the modern era. Bacon's utopia is built, not upon law, as in Plato or More, but upon science and human achievement. Bacon saw science as the complement of religion, not as a substitute for it.

As in More, sailors come upon an island, this one called Bensalem, "The Son of Peace." Bensalem is dominated by Salomon's House, a gigantic laboratory devoted to "the effecting of all things possible." Salomon's House is dedicated to the study of "the Works and Creatures of God," and scientific knowledge is not only the possession of the state, it is the possession of the elite that controls it. Bacon describes an elaborate system in which "mystery men," "merchants of light" and other scientists gather biological samples, conduct experiments and monitor research abroad, with the object of expanding human knowledge and power. The result is a society committed to progress, comfort and even luxury, one in which modern man might feel at home.

Bacon's utopia was a radical assertion of the importance and legitimacy of science. It proved to be a powerful influence in the process by which church doctrine began to accommodate science. A generation later it provided the inspiration for the foundation of the Royal Society.


Bellamy

Edward Bellamy
Looking Backward
1888

Edward Bellamy's *Looking Backward* offered a socialist view, late Victorian vintage, of progress. A wealthy Bostonian falls asleep in 1887 and awakes in the year 2000 to find all industrial problems have been solved in an era of "unexampled intellectual splendor." The triumph of monopoly capitalism has led to its takeover by the state. Hunger is no more, technology has been harnessed for the benefit of all, and industries have been nationalized. Money no longer exists, and the state governs all enterprises, from dining halls to dormitories. Workers share equally in the nation's resources, but everyone is thoroughly regimented. A citizen is schooled, he joins the industrial army, in time he retires and is then permitted to vote. A sense of mutual responsibility, not self-interest, motivates workers. "Each man is a member of a vast industrial partnership . . . as large as humanity."

Bellamy's book became an immediate bestseller and sparked the founding of thousands of societies to debate his ideas.

William Morris
News from Nowhere
1890

As convinced a socialist as Bellamy, but with less faith in industrial progress, William Morris in *News from Nowhere* rejected the regimentation implicit in *Looking Backward*. Morris envisioned instead a utopia nostalgically based on the preindustrial era.

Morris

Both Morris and Bellamy foresaw the coming of a classless society, but where Bellamy expected peaceful transition, Morris foresaw the system's destruction by revolution. Morris portrays life after a bloody civil war in 1952, when government, private property and money have withered away. "This is not an age of

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ur jeweler can show you many extraordinary diamond solitaires of a carat or more. The ring shown features a 1.67 carat brilliant cut diamond.

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But of all diamonds found, a solitaire of a carat or more is only one in a million.

And, like love, becomes more precious with time.

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Born from the earth. Reborn on a woman.

The extraordinary diamond of a carat or more.

Show the world you couldn't have made it without her.

A diamond is forever. De Beers

inventions. The last epoch did all that for us."

Like Samuel Butler in his 1872 satire, *Erewhon* (nowhere spelled backward), Morris rejected technology. He fantasized about discarding machines and returning to creative hand workmanship. His economic schemes strike readers today as hopelessly naive, but they presciently announce a concern for the quality of life: "Thus at last and by slow degrees we got pleasure into our work . . . and then all was gained and we were happy."

Butler

H.G. Wells
Things to Come
1936

In his celebration of science and technology, Herbert George Wells was a descendant of Bacon, and, in many ways, Bellamy. A socialist, propagandist and novelist, Wells trained in biology under the eminent T.H. Huxley. He nursed notions of utopia all his life, infusing them with his faith in science and his commitment to the idea of progress. Half science fiction, half utopian tract, Wells' vision was embodied in Alexander Korda's 1936 film, *Things to Come*. The movie offers a vision of life as unending struggle, made meaningful by man's quest for knowledge and power. In Wells' story, engineers and mechanics—"the brotherhood of science"—save the world from meaningless warfare, ushering in the "triumph of human invention and human will." Everyone shares equally in the work and abundance of the nation.

Wells

But unlike earlier utopias, from Plato's to More's to Morris', life in Wells' 21st century is neither simple nor stable. "For man no rest and no ending. He must go on—conquest beyond conquest. . . . And when he has conquered all the deeps of space and all the mysteries of time—still he will be beginning."

Aldous Huxley
Brave New World
1932

Aldous Huxley turned the technological visions of Bacon and Bellamy upside down in *Brave New World*. Science has made all 26th-century men happy and equal, but by destroying their individuality. To T.H. Huxley's most famous grandson, utopia becomes dystopia—a utopia gone awry.

In a world state where Henry Ford is God, people are scientifically conditioned to ensure "Community, Identity & Stability." The principle of mass production has been applied to biology: One fertilized human egg produces 96 identical twins, some alphas (leaders) and others, gammas (drudges). Children are taught through electroshocks and dream hypnosis. Adults are pacified through pleasure—narcotics, casual sex, the pornographic-movie-like "feelies." Intellectual life? The mind has become an accumulation of "Suggestions from the State."

George Orwell
1984
1948

Orwell, like Huxley, turned science into nightmare, but moved up the date considerably. In the bleak, hopeless dystopia of *1984* technology exists only in the service of political manipulation and repression. A socialist himself, a journalist as well as a novelist, Orwell attacks the totalitarian impulses of Soviet collectivism and Western technology alike.

Possessed of Huxley's dark vision but unrelieved by Huxley's humor ("Ford's in his flivver, all's well with the world"), Orwell in *1984* posits a world without truth, peace, love or plenty. Big Brother is everywhere, watching. Telescreens spy out people's every word and movement. Thought police hunt down the most dangerous criminals of all—those who stray in their thoughts. Rebels soon become "unpersons," and information technology permits all records of their very existence to be erased.

Huxley

"Technological progress only happens when its products can in some way be used for the diminution of human liberty," charges a manifesto against the state.

1984 may be an almost phobic response to 20th-century technological and political trends, but, like *Brave New World*, it has set the context within which many of the political and technological developments of today are assessed.

The Bearers of Tomorrow

Clearly it has always been true that the very future that exhilarates one observer terrifies another. How shall we find our way?

As a guide to steer by, the late computer scientist Christopher Evans recommended looking to slave societies—ancient Greece or Rome, Czarist Russia, the ante bellum South (perhaps even South Africa)—and being of good cheer, or at least keeping an open mind. For us, he said, the burden of labor will be assumed by machines, not slaves. Unemployment? Leisure? The difference between these two states of being is not absolute. Rather, it may express a point of view. Evans expected people to be committed to sport and exercise, cultural and artistic activities, even worshipping gods centered on the computer. Not for Evans is Wells' vision of man's unending aspiration. "Twenty-first century *homo sapiens*," he theorized, "will immerse himself totally in TV, leaving the twin challenges of space and time to the computers."

Orwell

"Behold, I make all things new."—**Jill Andresky**

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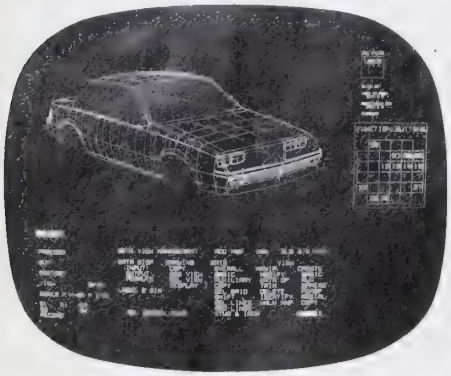

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Foreign invaders, cheap imports and poor productivity have made the U.S. honey industry anything but the bee's knees.

Commie bees, killer bees

By Robert Teitelman

THERE'S ENOUGH melodrama in the plight of the U.S. honey industry these days to make a good "B" movie. Not only is it reeling under swarms of cheaper, foreign honey, but there is a low, ominous drone coming out of Washington, the sound of bureaucrats threatening to yank away price supports. Even worse: The African, or killer bee, really is coming.

What brings the honey industry to such a precarious state? Ironically, it was a sweet, brief taste of success. Americans have traditionally consumed less honey than Europeans—less than a pound per person per year to West Germany's four to five—so honey production remained low, and the industry has tended to remain in the hands of hobbyists. But in the early 1970s, American consumers went on a natural-foods kick. That forced up demand at a time when honey production had begun a decade-long decline, for reasons still unknown to scientists. Raise demand and lower supplies and prices naturally go up: from 15 cents a pound in 1969 to 50 cents a pound in 1974. That jump was more than enough to attract hungry producers from Mexico, Argentina and the People's Republic of China.

With so much foreign honey oozing into the American market, pricing started to get sticky. By 1980 the parity price, which is partly based on a ten-year average of market prices, had risen above the market price. U.S. producers then began selling their honey to the government instead of trying to fight it out in the open market. Like Winnie the Pooh, the U.S. Department of Agriculture found the honeypot stuck on its head, to the tune of some 39 million pounds in 1981 alone.

But parity is no solution. If prices stay low, the parity price will inevitably drop. Meanwhile, a debt-burdened Administration is trying to pull the honeypot off its head by having the support price set at the discretion of the Secretary of Agriculture.

Fighting over parity is silly. The honey industry could deal with the problems of imports by improving their lackluster marketing to increase consumption. The American Beekeeping Federation, the largest trade group, has mounted several voluntary marketing campaigns in the past, but each time they fizzled, as contributions dried up. The industry has also failed to tend to the bottom line. In most regions, beekeepers provide pollination service to farmers for free. That service ought to be worth something, given the estimated $18 billion pollination adds to the U.S. fruit and nut crop. "Part of it is tradition," says Troy Fore, the editor of *The Speedy Bee*, a trade newsletter. "Beekeepers would rather make money off honey than pollination. And many farmers figure they can do without." Beekeeping hobbyists can afford not to charge for pollination, but commercial beekeepers cannot. In California and Washington, where large fields are common, beekeepers typically get $20 per colony to pollinate, taking in about 50% of their revenues in fees, compared with 10% nationwide.

Using those fees, the undercapitalized industry could increase productivity. In the past 20 years, mechanical honey extractors have become common, though little else has changed. Although some plastic hives are now used, most beekeepers still use wooden hives. One insulated plastic hive, developed by Rotoplas, an Israeli company, reduces the bees' consumption of their own honey. But David Cale, purchasing manager of Dadant & Sons, Inc., a beekeeper supplies firm, is gloomy about the hive's prospects in the U.S. The Rotoplas hive is more expensive than wood and round, and U.S. beekeepers are set up to service square hives. It is molded in one piece, so it can't be knocked apart for transport. Moreover, claims Cale, U.S. bees don't like it. "They'll only accept it during the most intense honey flow, when they don't have any choice."

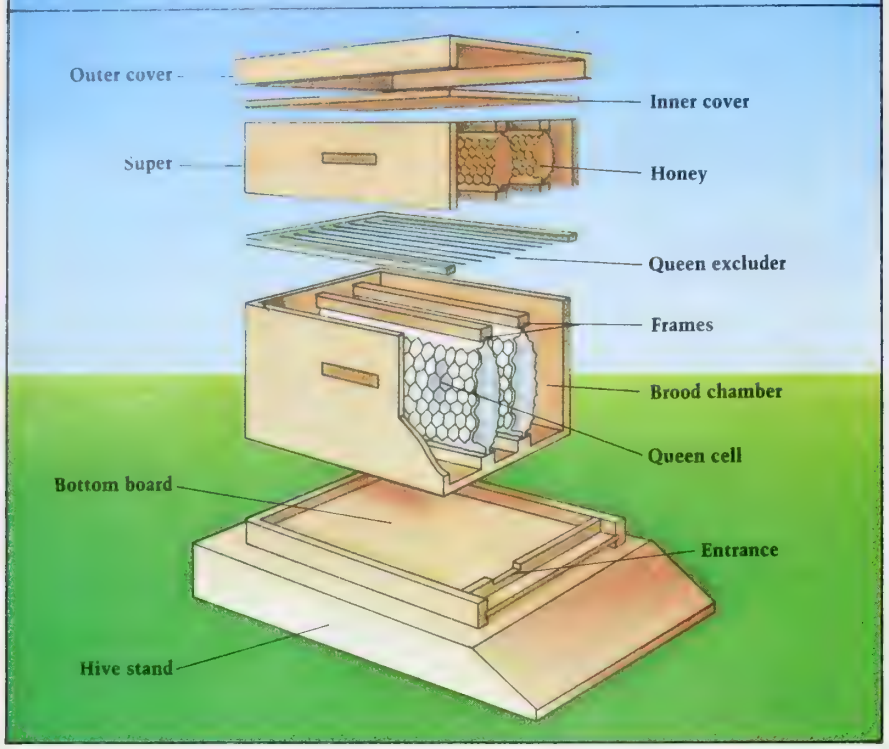
But plastic hives are not the only weapon of the research lab. Geneticists are hard at work on honeybees that are both more manageable and productive. And entomologists have been seeking to increase the efficiency of the hive. One recent example: Dr. Alfred Dietz of the University of Georgia has devised a way to allow a queen larva, or egg, to emerge within the hive itself. Usually this virgin queen would be killed while the old queen was still alive. By segregating the virgin but allowing it some social contact, the virgin can begin reproduction immediately upon the death of the queen. The result: 88% more queens can be produced.

The real excitement, however, lies with pheromones, chemical compounds that bees use to communicate, to mark trails or indicate danger. The possibilities are enormous: Substances in beeswax combs, for example, may be used to stimulate honey production. "The emphasis is on productivity and management," says Hachiro Schimanuki of the Bioenvironmental Bee Laboratory. "We need ways to control bees, to attract them when we want them, to send them to certain areas and keep them from swarming."

Pheromone research has taken on a real urgency, not only to save the U.S. industry from imports but to beat back the African bees, which are slowly heading toward the U.S.' major beekeeping regions. These bees, brought to Brazil in 1956 in a breeding experiment that went awry, are smaller than

Beelines

The beehive consists of several stacked chambers. In the brood chamber, male drones continually fertilize the egg-laying queen. The female workers scout for food and fill beeswax cells full of honey in the super.



the European honeybee, meaner and, so far, uncontrollable. When they invade a hive, they kill the queen and substitute their own, thereby dooming the remaining worker population to extinction. While stories of killer bee ferocity are a tad exaggerated, economic fear of them is real. In Venezuela, honey production, zooming along at 700 tons in 1976, dropped to 100 tons in 1978 after the killer bees buzzed in. Today the nasty invaders are in Panama; by 1990 they could be in the southern U.S.

This melodrama isn't over yet. Can the U.S. honey industry get its own hive in order? Can swarms of imports be beaten off? Can new technology take the sting out of the killer bees?

Stick around.

The sleep disease

CONSIDER THIS: At a major corporation's annual meeting, in the presence of hundreds of stockholders and the entire board, the CEO suddenly slumps over in his chair. Heart attack? No, worse. Stockholders might be willing to forgive a CEO's death, but they are apt to be merciless when the man of the hour falls asleep at the podium.

Implausible? Not according to Dr. David Rapoport, assistant professor of medicine at New York University, who works at New York's Bellevue Hospital. For the executive who falls asleep at the wheel of his car or who has to give up his job because he can't keep awake, "Pickwickian Syndrome," named after Charles Dickens' first complete description of the affliction in *Pickwick Papers*, is no yawning matter.

For many years, medical researchers ascribed the problem of sudden and recurring somnolence to "underbreathing." Patients could not oxygenate their blood sufficiently to maintain alertness when they wanted to. But since the mid-1970s doctors have increasingly linked Pickwickian Syndrome to a little understood but relatively common disorder called "obstructive sleep apnea."

Unlike breathing too little, sleep apnea, as its name denotes, is a temporary cessation of breathing during sleep. Apnea is Greek for "no breathing." While most laymen assume that breathing is automatic, researchers have discovered that breathing is a complex neuromuscular activity. Normally, when a person inhales, the muscles

Technology

around the airway above the vocal chords stiffen to keep the airway open. When a person sleeps, those muscles relax a bit and airflow is restricted. When the relaxation is too severe, the airway closes, and breathing ceases.

According to Rapoport, this process, when it is occasional, is neither abnormal nor harmful. "Most people have ten apneas a night for a duration of, say, up to 20 seconds," says Rapoport. "A victim of severe, obstructive sleep apnea, however, may stop breathing twice every minute. Over an eight-hour spell, that's almost 1,000 apneas." And, adds Rapoport, people with Pickwickian Syndrome almost invariably have the worst, and most frequent, sleep apneas.

To illustrate more clearly how the disorder manifests itself, Rapoport plays a tape recording of a sleep apnea victim. One hears, in repeated succession: nothing for 25 seconds or so, then five or six quick breaths preceded by an implosive grunt or snort, then nothing again. During the silent phase of the cycle, the victim's chest heaves as if he were breathing, but because the airway has temporarily collapsed, no air can actually reach the lungs. The victim may be unaware of the cycle, which can go on for hours of apparent sleep.

However, as recordings of brain waves show, victims actually wake up each time they start breathing again and then fall back asleep after taking a few breaths. Says Rapoport: "A victim might think he has been asleep, but he has really been waking up twice or more every minute. That's hardly a restful experience." Which explains why those suffering

Apnea researchers Drs. Rapoport, Goldring and Garay
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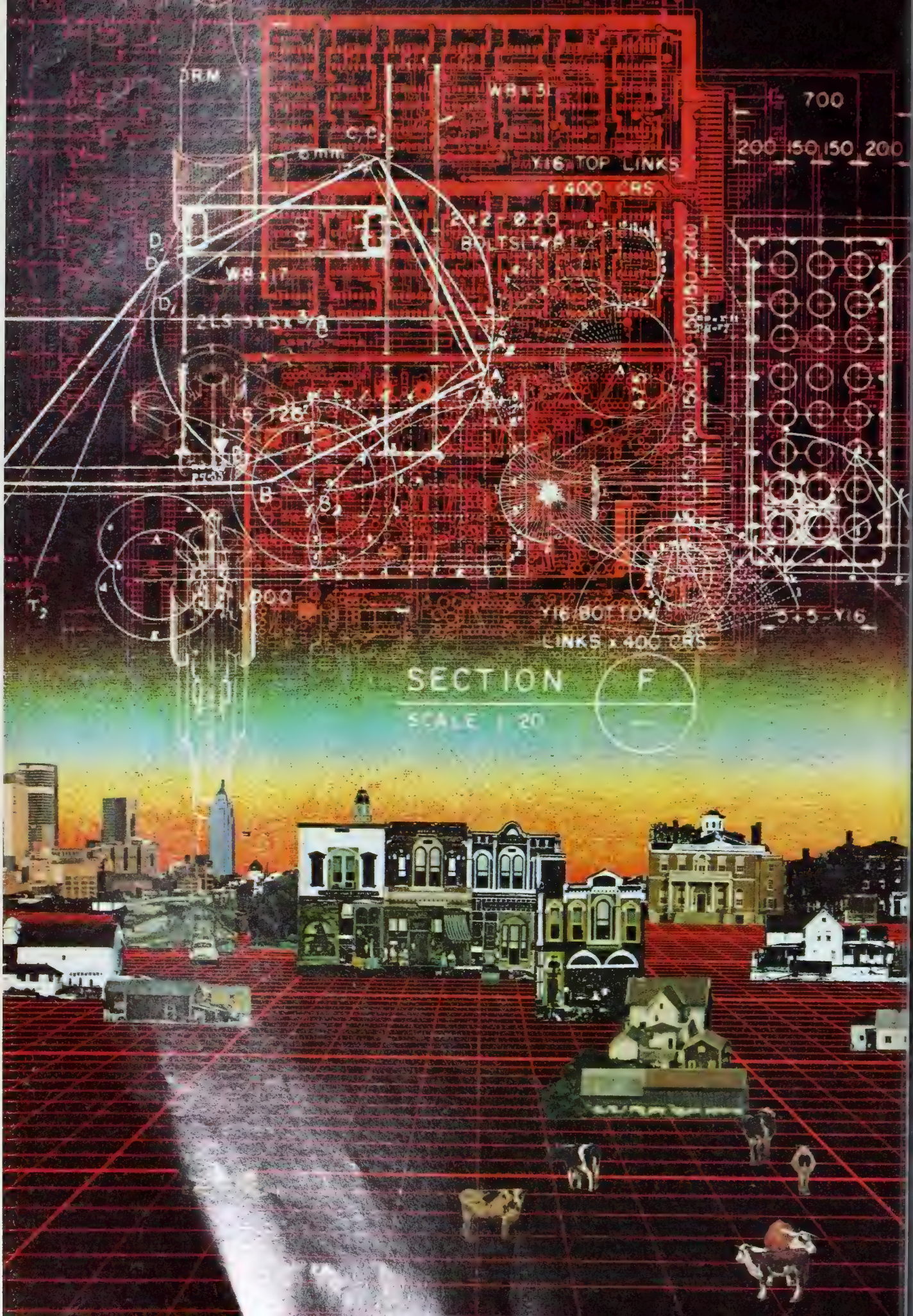
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severe apneas can involuntarily nod off at totally inappropriate moments.

What, then, causes airway obstruction during sleep? Medical researchers don't know, although they do point to a number of conditions that seem to be associated with the disorder. For example, children with big tonsils are apparently more prone to apneas than those without; men—especially the overweight, middle-aged variety—are more likely to suffer apneas than women of any age or size. Also, studies suggest that people who have suffered traumas to the face or nose are prone to apneas, and drugs and alcohol may predispose a person to the disorder. Additionally, aside from excessive daytime sleepiness, there are a number of clinical features associated with sleep apnea: noisy snoring, sexual impotence, morning headache, bedwetting, hypertension, intellectual and personality changes and, worst of all, unexplained nocturnal death. Says Rapoport: "It seems that sleep apnea might be a minor disease which causes major problems, or it may be an important component of a lot of other diseases."

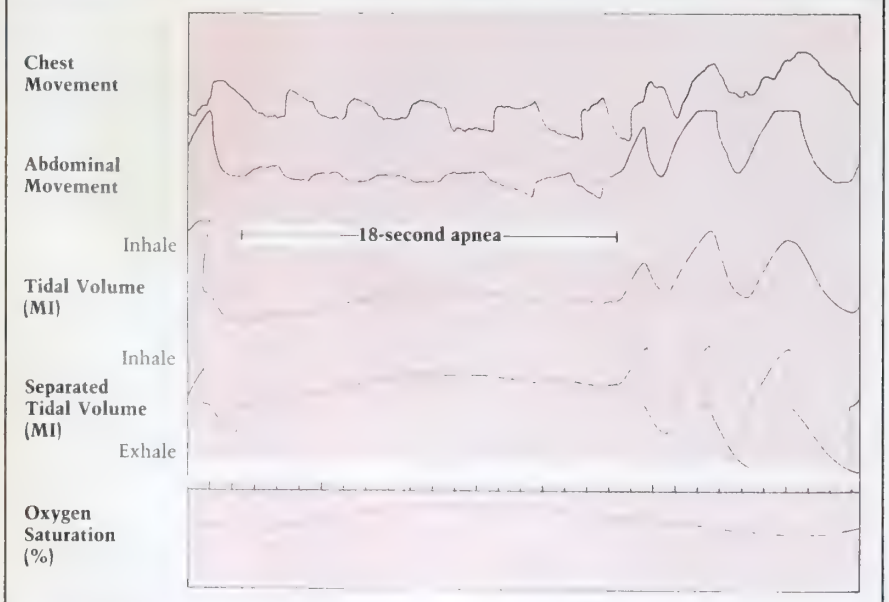
There is, fortunately, one definitive cure for obstructive sleep apnea—a tracheostomy, which creates a bypass below the upper airway obstruction. But a tracheostomy is not very cosmetic: Breathing through an opening in one's throat is not too appealing, and there is a danger of infection.

More important, sudden relief from the apneas can have an unpleasant psychological impact. Rapoport points out that some patients, after relief, suddenly discover they have been hamstrung for years—perhaps a good portion of their adult lives—by what, in retrospect, seems a fairly simple ailment. It is as if, says Rapoport, they suddenly wake up and discover they have lost a good chunk of their lives, or time that might have been lived more fully and effectively. Severe depression, therefore, can occasionally be one result of a cure.

The problem, says Rapoport, is that most patients don't have apneas severe enough to warrant a tracheostomy. For them, Rapoport and his colleagues are experimenting with an approach initially tried in Australia: a mask that fits over the nose and is worn at night to provide a positive pressure on the airway and thus keep it open. It works, says Rapoport. He tells the story of a public school administrator in New York, who says the device saved him from a pink slip. Taking a deep breath, Rapoport says: "In a sense, it just about saved his life."—**Martin Love**

No yawning matter

Researchers can map the duration and effects of obstructive apneas with graphs. The apnea tracked in the charts below lasted for 18 seconds. The abdominal and chest movements show that the victim tried to inhale or exhale, but the obstruction—the collapsed windpipe—blocked the flow of air. As a consequence, oxygen saturation of the blood was below normal levels half the time the victim tried to sleep. This victim actually had 60 apneas every hour.



Courtesy of New York University Medical Center

The bad seed

Do people have the right to get sick? It sounds like a foolish question, yet it may emerge as the key issue in occupational health in the years ahead. That's because, increasingly, doctors are discovering that many diseases are not simply the result of germs, chemicals or hazardous substances but, at least in part, a result of the genetic composition of the person who gets sick. And, as scientists have learned to identify which genes are linked to which illnesses, genetic screening has become a hotly debated jobs issue.

The reasons are simple. If people vary in their genetic susceptibility to disease, the theory goes, then some will have a higher probability of getting ill from exposure to chemicals and dust in the workplace. Screen out those workers and you cut occupational illness. The benefits could be large. In 1981 alone, doctors diagnosed over 126,000 cases of work-related disease, and industry spent an estimated $5 billion on employee safety and health.

But organized labor is leery of genetic screening, which the unions think will create genetic untouchables, workers who cannot get jobs because of their heredity.

"The issues under discussion are social and not scientific," says Sheldon Samuels, director of health, safety and environment for the AFL-CIO's Industrial Union Department. Samuels and other labor officials worry that screening will encourage industry to use such tests as a legal defense against cleaning up the workplace and against compensating any sick workers. "There's a tendency to concentrate on who is susceptible," says Dr. Rafael Moure, industrial hygienist for the Oil, Chemical & Atomic Workers Union, "rather than on controlling exposure in the workplace. We see that as very dangerous."

That charge is flatly denied by Dr. Bruce Karrh, director of medicine, safety and fire at Du Pont, which does not currently do screening. "If we ever do use genetic tests," he says, "it won't be because they screen people out. If the tests have any use, they

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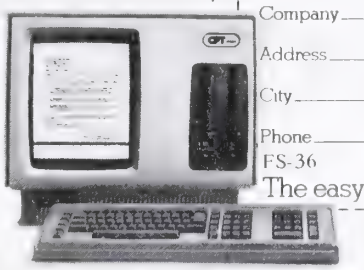

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will make sure people can do their jobs without risking their health."

Screening itself isn't new. An Office of Technology Assessment study found that five major industrial companies already screen for biochemical symptoms of genetic traits. More significant, 54 others said they may begin genetic screening in the future. What's new is the ability to look directly for the genetic mutations that lead to disease.

How that works is illustrated by a new procedure developed by the City of Hope Hospital in Duarte, Calif. According to Dr. Brenda Conner, scientists there have made probes of synthetic DNA that search for genetic mutations. Probes exist for sickle-cell anemia and four related diseases, and Conner expects to double that number by year-end.

Basic genetics underlie City of Hope's tests. Human DNA consists of 3 billion nucleotides, sequenced together in individual genes. Sickle-cell anemia stems from a single nucleotide change, called a point mutation, out of the 1,450 nucleotides in the gene for betaglobin, a component of blood. The City of Hope probe locates that point mutation.

For now, such tests have limited applicability because specific point mutations are known for only a few diseases. But half a dozen other labs around the country are working on similar tests, and intense research is currently going into identifying the genetic aberrations that lead to disease. Many hereditary illnesses stem from unknown, single point mutations, while others result from complex series of mutations. "We're just at the beginning," says Conner. "There should be a rapid explosion of information available soon."

Soon may be sooner than anyone thinks, and when genetic screening is fully developed, industrial workers aren't the only ones who may have to wrestle with the problem. What about the young corporate executive who has a gene linked to a high incidence of heart disease? Or the brand-new M.B.A. who carries the gene for Huntington's disease, a neurological illness that doesn't appear until middle age? Will a company hire him, knowing there is a high probability that he will become fatally ill at the height of his career?

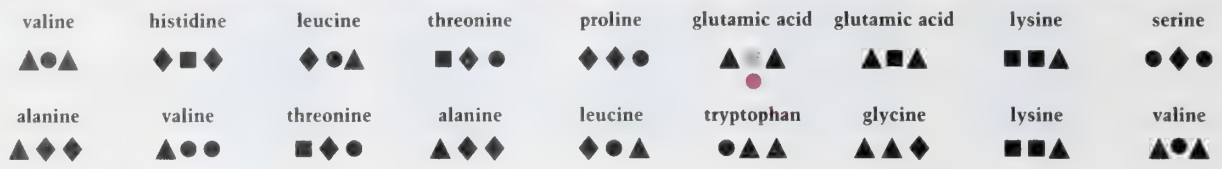
Screening also hits on several tricky legal issues. If tests did accurately predict future illness, an employer who placed susceptible workers in a high-risk environment might be charged with negligence. Yet employers whose screening tests only affect one race—and genetic diseases, by their very nature, tend to concentrate within ethnic groups—may be guilty of discrimination under the Civil Rights Act. And how about this—does a genetic predisposition to illness constitute a handicap? If so, will screened workers be protected by statutes barring discrimination against the handicapped? Under any of these laws, it's likely that an employer would have to demonstrate that screening is the only safe, effective way of eliminating exposure risks.

Still, despite all the controversy, there's no denying the benefits that could come from screening. No one knows how many will be affected, or even how widespread screening will be. But by the end of the decade, scientists, in all likelihood, will be able to warn many people away from jobs that endanger their health.

There is another possibility. The fear now, says Dr. Arno Motulsky, director of the University of Washington's Center for Inherited Diseases, "is of people being assigned what's best for them. But take the reverse. You test for your strengths and weaknesses. Based on your own volition, you choose a career that's best for your makeup and stay away from external agents that cause you problems." Recognizing genetic differences between people doesn't have to lead to a Brave New World of genetically slotted Alphas, Betas and Gamma Minuses.—**Jane Sasseen**

Mutant

Below, a segment of the gene for betaglobin, a component of blood. The arrangement of the nucleotides, the four building blocks of DNA, determines the production of specific amino acids, such as valine or histidine, in a gene. But note the mutation in the first glutamic acid shown, where thymine has replaced adenine. That single mutation triggers a disease of the blood—sickle-cell anemia.



Key to nucleotides:

■ adenine ● thymine ◆ cytosine ▲ guanine

Source City of Hope Hospital

Hardball in software

If you want to become a market leader in anything, you have to work harder than anyone else, and more imaginatively. If you don't believe that, ask John Imlay Jr., CEO of Management Science America, the nation's leading software company.

"Back in 1971," he recalls, "while MSA was in reorganization because of previous management's blunders, there was a software users' convention we wanted to attend, to pick up some orders. We went to the bankruptcy judge and asked permission to spend $5,000 at the convention, a pittance compared to other firms."

After some haggling the court gave him the money, and Imlay went to the show, passing out buttons that read "Thanks to Banks." Says Imlay: "We were telling the banks, our largest customers, that they did us a favor by supporting us in hard times. They understood what we meant." The bankers also took a fancy to Imlay's display booth, where a Southern belle bounced around on a waterbed. Such tomfoolery paid off. By convention's end MSA had attracted more interest than any other firm.

That was when Imlay's pared-down software accounting applica-

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tions company had only about $2 million in revenues, so those orders helped his struggling software company survive.

Imlay has a flair for the dramatic. He once brought a tiger into a sales meeting. Another year he brought in a racehorse, then a shark in a tank. He once wheeled a coffin into a users' meeting to symbolize "the death of the minicomputer."

But Imlay also backs up his showmanship with savvy marketing that has made MSA the leading independent software firm in the country, with $101 million in revenues and $9 million in profits last year.

That success hasn't deterred Imlay from buttonholing potential customers. Esther Dyson, editor of *RELease 1.0*, an electronics newsletter, relates how Imlay, spotting a big customer exchanging niceties with several of Imlay's competitors, strode over, "grabbed the man by the shoulders, lifted him up, slapped him on the back and asked, 'Are my salesmen giving you good service? How's the business going? Are we doing all we can for you?'" Imlay knows who his clients are.

He has 100 other equally aggressive salesmen out beating the bushes for general ledger, payroll, accounts payable and receivable software orders. Imlay motivates his salespeople with a large customer base, sizable bonuses, profit sharing and stock purchase plans. Says William Graves, MSA's president, "Up until five years ago it wasn't unusual for a top salesman to be earning more than Imlay or myself. In this company the revenue producers earn the big salaries." How much can a good salesperson earn? Well over $100,000 a year with bonuses. And that excludes profit sharing and stock.

Imlay also takes good care of his 1,400 other employees. They all share in company profits and many are stock owners. Employees hold 9%, worth $25 million, of MSA shares (top officers hold 52%). In an industry noted for high employee turnover, MSA's annual turnover is only 15%.

MSA's software sells well because there's so much of it. MSA was the first company to market a family of software programs successfully. While other software companies specialized in one or two applications programs, MSA salesmen went to companies with sales of $40 million and up and offered them the convenience of a single source for seven programs that could work on any computer and could be added as needs grew.

In addition, claims Imlay, "an MSA software package represents roughly a 10-to-1 price savings over what it costs to do it yourself. Second, it takes two years to develop your own program. But you can have it up and running in three months when you buy from a software company. Third, with payroll programs, taxes, accounting needs and rules change all the time. That requires lots of maintenance people on hand in an in-house program. We update the changes for them and the companies send us a yearly fee."

But in the fast-moving computer industry, five years is a lifetime. Big companies are moving in—Dun & Bradstreet just agreed to buy McCormack & Dodge—and other software companies like University Computing have become sizable competitors and have learned to market like MSA.

At the same time, the very rapid growth is slowing down for the accounting and financial application programs used by big mainframe computers. It was 45% to 50% a year in the late 1970s; now it's about 30%. As a result, profit margins have started to come under some pressure recently.

MSA Chairman John Imlay Jr.
A flair for the dramatic.

To try to offset the gradually slowing growth in his central marketplace, Imlay has pushed into three areas. First, he has built up his overseas software direct sales operations (others use agents) more than any other company. Last year that spending began paying off, when overseas revenues jumped 75%, to $24 million, and profits moved solidly into the black.

Second, Imlay realized that personal computers would rapidly result in a huge software market, so in 1981 he acquired, for $5.5 million, Atlanta-based Peachtree Software, a tiny ($2 million sales) outfit with a core of PC products. Last year Peachtree racked up sales of $9.4 million.

MSA recently acquired another software company—Arista—from Xerox, for $4 million in cash. Arista was Imlay's move in yet another direction—into industry-specific software like manufacturing, banking or health care. Specific industry application programs are growing much faster than general application software.

All this product improvement and new development, spurred by increased competition, is costing MSA lots of bucks. Last year 22% of its $101 million sales went into R&D. That commitment is likely to remain at about 20% of sales for some time. Thus, despite the fact that MSA had $25 million in cash last year and no long-term debt, it doesn't mean that MSA is anywhere on its way to becoming a cash cow.

Imlay is looking to acquire yet another software company, probably in the specialty applications area. The only problem is there are lots of other companies today with high stock prices, and almost every small, privately owned software company is looking to go public at incredibly high price/earnings multiples.

Imlay can afford to be patient. He figures either the right company will opt to join with MSA at a reasonable price or he will wait for a shakeout.

A shakeout in the software industry? There have been shakeouts before. Some analysts are worried that investors are overpaying for the industry's growth, which in some cases is 40% to 50% a year. But a number of software companies are selling at 50 times earnings and up.

MSA is vulnerable, too. It has to grow at least 35% a year to justify its current price. That won't be easy for a $100 million company. One stumble and MSA's stock would tumble. But Imlay's people have been through hard times. If MSA runs into any problems, they more than likely won't be fatal. That much can't be said for some hotshot software companies that haven't been tested.—**Howard Rudnitsky**

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To some, publishing is a glamorous business, but not to Bob Marbut of Harte-Hanks Communications.

Forget glamour, he will deliver the mail

By Thomas O'Donnell

"THERE'S NOTHING CORNBALL or cowboy about those guys," says an analyst describing Harte-Hanks Communications Inc. "They're sophisticates who would be just as much at home in Cambridge as in San Antonio."

Robert Marbut and most of his top managers don't fit the image of Texas swashbucklers. White shirts are their preferred corporate uniform, and they work out of a new, antiseptic bank building near the outskirts of San Antonio. The talk is B-school bland rather than Texas twangy.

Nonetheless, Harte-Hanks is one of the most aggressive, competitive companies in an industry so conservative that running *Doonesbury* on the editorial page is often considered a major innovation. Since taking the company public in 1972, Marbut, a Georgia native who holds an engineering degree from Georgia Tech, has built revenues from $70 million to nearly $400 million. Along the way, earnings have jumped even faster, from $4.7 million to an estimated $27.3 million. Earnings have grown for 42 consecutive quarters—although it was a close call last year. This year promises to be a banner year, leveraged by cost-cutting plus 1982's consumer-led recovery.

A big reason for this success is that, despite his conservative manner, Marbut is a Texas-style risk-taker. In the early 1970s he realized small newspapers without strong competition would best be able to maintain high profit margins. It was fast becoming a business where one is company and two is bankruptcy. Harte-Hanks raised the number of such "monopoly" papers in its fold from 11 to 28. All of them are small papers; less prestige that way, but fatter profit margins.

Harte-Hanks President and CEO Bob Marbut
Willing to hang fliers from doorknobs.

Harte-Hanks papers stretch from Yakima, Wash. to Framingham, Mass. But today there are few newspapers left to acquire; everybody is on to the game. "The days when small, profitable newspapers were just waiting to be discovered are gone," Marbut explains. Broadcast media are logical supplements, and Harte-Hanks owns 4 television stations, 11 radio stations and 9 cable systems. But here, too, acquisitions are hard to come by and expensive. So, the real hopeful in its stable is a grab-bag division called Consumer Direct Marketing.

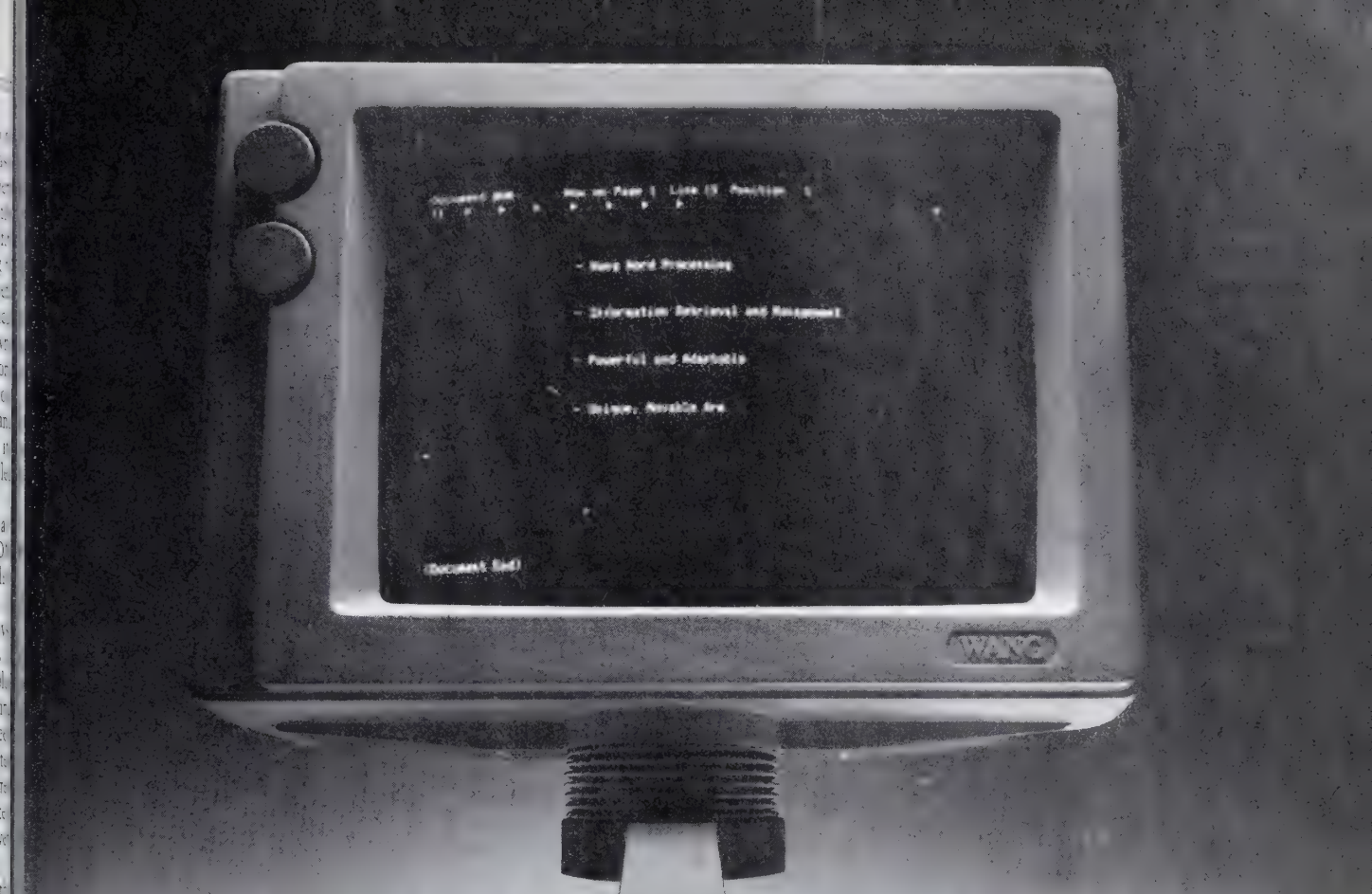
This labor-intensive operation accounts for 28% of revenues. CDM runs a private mail system that delivers sample products to consumers. It operates a computerized message system that competes with telegrams. It also has created a system that enables retailers to pinpoint their advertising messages. Many retailers have been shifting from full-run to targeted newspaper ads, or to home-delivered fliers. Harte-Hanks designs, writes, prints and delivers such fliers, even hanging them from doorknobs.

All this seems to hark back to the old newspaper delivery boy and doesn't sound very exciting in this high-tech age. But Marbut, a man whose thinking cuts through the usual clichés, expects that very little of Harte-Hanks' growth will come from so-called glamour businesses. He is planning to sell three radio stations, and his toehold in cable is partly defensive. (In cable he kept his entry costs low through a savvy option and minority-interest buying strategy.)

Marbut gets excited about the prospects of CDM, the business seemingly so lacking in excitement. "Sure, it's grubby and it's hard to manage," says Marbut, "but we're willing to put in the work and we're making money." CDM also fits the Harte-Hanks philosophy: It's small, it doesn't cost much to get in and full-line newspaper-chain competition isn't around.

In the same way, Harte-Hanks has been able to invade such highly profitable metropolitan markets as Los Angeles and Miami not by taking large newspapers head-on but by surrounding their territory with low-cost, ad-filled papers called pennysavers.

That cold-blooded philosophy prompted Marbut to make his first tough decision shortly after he arrived at the company in 1970. He had worked seven years for the Copley newspaper chain and asked Harte-Hanks to back him in his own publishing venture. Instead, the owners



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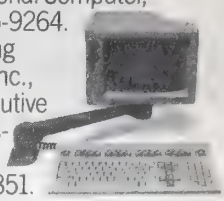

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of the San Antonio chain asked him to come aboard as president. Within three years he sold two flagship papers to Australian publisher Rupert Murdoch for $19.5 million. Marbut used the cash to pay down debt, and acquire smaller papers and other properties. The switches may not have done much for the company's image, but they proved highly profitable.

All this is done coolly and unsentimentally. Under Marbut, the company has acquired or launched 40 publications. But it has also gotten rid of 15. "We are not afraid of making mistakes," says Marbut, "but when we see one, we correct it fast."

That same aggressiveness has recently been applied to costs. Since the recession began and advertising revenue softened, Harte-Hanks has cut expenses. As a result there are no frills such as pictures or houseplants in executives' offices, and the company kitchens are not staffed. "Yesterday, I made four cups of coffee for visitors," says Marbut proudly.

This Spartan style, plus Marbut's fondness for monopoly newspapers leads to regular comparisons between Harte-Hanks and Gannett. That isn't something Marbut enjoys, because he doesn't regard Harte-Hanks as a newspaper company but as a consumer information service company. "The analogy," he says of comparisons with Gannett, "will be less accurate in five years. We like to do things our way. We think we're unique." That they are. ■

American diplomacy couldn't cut Russian export earnings from natural gas, but it looks like the market can.

The pipeline revisited

By Lawrence Minard

THESE ARE GOOD DAYS for Yuri Andropov—that well-publicized student of Americana—to think about baseball, or anything *but* Russia's prospects for earning convertible currency. Gold dropped $100 an ounce, a swing worth $500 million based on estimated Soviet gold sales last year. With crude oil at $27 a barrel, Russian oil exports of around 75 million tons last year would be worth $3.5 billion less this year.

And now there are doubts about the export earnings ability of Siberian natural gas, which Moscow counts on for currency through this decade and next. Three years ago Western Europeans were climbing over each other to sign up for gas from Russia's huge new Urengoy pipeline (FORBES, *June 7, 1982*). The pipeline was to be capable of delivering up to 50 billion cubic meters (bcm) a year to Europe by the late 1980s. That would be on top of the 25 bcm of Russian gas Western Europe already buys. At capacity throughout, the Urengoy line would have provided Russia with around $10 billion annually in Western currency. Or so Moscow hoped and Washington feared.

Unless the current oil glut disappears quickly, however, Yuri Andropov can count on far less than $10 billion a year from the Urengoy line. To date, the Europeans have signed contracts to purchase barely 21 bcm a year of new Russian gas (10.5 bcm for West Germany, 8 for France, 1.5 for Austria, 0.7 for West Berlin, 0.6 for Switzerland). Italy has said it will take 8 bcm, but it has yet to sign a contract. Even if Italy takes its full share, as things stand now the Urengoy line could earn roughly $6 billion a year by 1988 or 1989, when deliveries are supposed to reach their peak.

In fact, Russia's hard currency gas earnings could be far less than $6 billion. Europe is now awash in natural gas. And as oil's price has fallen, European consumers have begun switching from gas to oil.

Also, say knowledgeable sources, the Europeans' gas contracts contain several kinds of flexibility. The Urengoy gas has a base price, delivered, of $4.65 per mcf and a minimum price, when deliveries commence next year, of $5.75 per mcf. But the price is also pegged to competing fuel oils. Should the minimum price be above the fuel oil price, German industrial and government sources told FORBES, the consumers will insist that the minimum price be reduced.

There is also flexibility on volumes. Under "take or pay" clauses, Moscow's European customers can take as little as 80% of contracted amounts. If all consumers took full advantage of this flexibility, Russia could lose sales of nearly 6 bcm a year.

The German contract, according to informed outsiders, contains an added degree of flexibility that could in theory reduce German purchases of Soviet gas to as little as 6.72 bcm a year, 36% below contracted amounts.

Italy has signed a new three-year contract to take 19.7 bcm of Algerian gas. The price is purely political—about $5.40 per mcf, landed, vs. less than $5 per mcf for Russian gas—and the Italian government has agreed to rebate 53 cents per mcf to the Italian gas companies. So there is clearly an incentive for Italy to average down with relatively cheap Russian gas. Equally clearly, however, the new Algerian gas limits Italy's demand for additional Urengoy supplies.

France, too, has been buying more Algerian gas and probably will not need extra Soviet supplies. The French government now believes that Russia will account for no more than 11.5 bcm of the 38 bcm a year that the country will consume by 1990.

So, unless the energy glut evaporates, Russia will probably remain hard pressed for energy-based foreign currency earnings throughout the 1980s. That, of course, is bad news for European businessmen and American farmers hoping to penetrate the potentially vast Russian market. It is still worse news for NATO member Norway, which would like to sell more gas to Western Europe (FORBES, *Sept. 27, 1982*). But Norway's gas is costly to develop, and there is scant hope Norwegian gas will compete with Russian gas in a glutted energy market.

So Washington's reaction to Moscow's pipeline disappointments may not be unalloyed joy, but there is sure to be quiet satisfaction. ■

TIME

Ted Thai

A gift of intimacy.

No grand theories–just a striving to communicate the specifics that put an audience into a character's shoes.

Of all the theories about acting one might expect from Laurence Olivier, perhaps the least expected one is the real one: that acting theories, and theorists, are sham.

The essential thing, Lord Olivier recently told a TIME writer, is specifics: not the abstraction of what a character feels, but how he looks, how he walks, that involves an audience with the figure on the stage.

It is the gift of intimacy; and it's as important to good journalism as it is to good theater. Indeed, it probably accounts for the perennial contemporaneity of TIME Magazine.

When TIME was invented in 1923, it systematically noted the snippets of gossip, the size of noses, the habits of speech and gesture that helped make the news alive and immediate that involved TIME readers not only intellectually but also emotionally. It's more than a matter of style; there can be no style without substance. Essentially it's a matter of knowing people firsthand instead of merely knowing about them; of getting news, as often as possible, from the people who make it; of habitually dealing not with abstractions but with specifics. It is the carefully nurtured rapport between TIME and its subjects that created the long-standing rapport between TIME and its readers: a gift of intimacy that persuades 29 million men and women around the world to read TIME each week. They get more out of TIME, because more goes into it.

TIME

More goes into it.

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Race walker in New York's Central Park
The only gear needed: comfortable shoes.

Race walking can't be knocked. It's easy on your legs, a snap to master and can do as much to condition you as jogging can.

Personal Affairs

Edited by William G. Flanagan

Take a walk

By Kevin McManus

As RUNNING's popularity continues to grow, so do the ranks of injured runners. Many hobbled athletes, reluctant to aggravate their injuries, are turning to a safer form of exercise—walking.

Recreational walking is at least as old as Socrates, of course, and walking races, at distances of 10, 20 and 50 kilometers, have been an Olympic event since 1908. What is new in our time is the emergence of clubs whose sole purpose is to organize pleasure walks and races. Broken-down runners aren't the only recruits. They are probably outnumbered by the health-conscious who love the outdoors and whose legs and feet can't take the punishment that jogging can inflict.

Most race walking coaches advocate a peculiar-looking gait that involves a swinging of the arms and a bouncing, vigorous stride. It's called race walking, speedwalking, healthwalking or PowerWalking. Though the techniques differ slightly, the benefits are the same: stronger muscles and bones, improved heart and lung reserves, reduced risk of heart attacks, more efficient digestion and a flatter stomach. According to fitness consultant Howard Jacobson, author of *Racewalk to Fitness* (Simon & Schuster, $11.95), a race walker actually burns more calories than a jogger when both are moving at between 5 and 7 miles per hour.

Experts on the subject strive mightily to mint fresh superlatives. "Walking improves the quality of life, and it improves man's life span," says Albert Marchetti in *Dr. Marchetti's Walking Book* (Stein & Day, $10). Steve Reeves, a former Mr. Universe and the star of *Hercules* and other films, enliv-

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Personal Affairs

ens his book *PowerWalking* with a story about a neighbor to whom Reeves introduced his discipline:

"After several months and many conversations, he at last agreed to meet me at my home one Saturday morning to give PowerWalking a try. I handed him a pair of three-pound hand weights and grabbed a pair of five-pounders for myself. We took off on a three-mile PowerWalk through the hills. He assured me that he wouldn't have any trouble keeping up with me on the walk since he was 20 years younger than I and had been faithfully jogging five miles a day for two years. By the time we returned to my house, it was a different story. His legs were quivering and his complexion had a greenish tinge to it. After a short rest, he recovered. The advanced PowerWalk I had taken him on was more demanding than he had bargained for. Today, this previously skeptical neighbor is one of the most avid PowerWalkers I know."

And listen to Sal Corrallo, a 52-year-old Department of Education executive in Washington, D.C., who race walks between 40 and 50 miles a week: "It does more for your body than running does. It shifted weight to my shoulders and chest and slimmed my hips considerably and hardened my body all over." Corrallo, who took up the sport eight years ago after two sedentary decades, is now one of the premier over-50 race walkers in the world.

As Corrallo and other aficionados point out, race walking is easy to do. It requires no special gear other than a pair of comfortable shoes. Thus equipped, find an open space, do some stretching exercises and you are ready to go. Take easy strides, planting your foot at the heel and rolling it forward to the toe. Keep the heel of your driving foot down as long as possible and use your buttocks muscles to help you push off. Swing your arms like pendulums—right arm forward when left foot is planted and vice versa. This motion assists in increasing your stride length and helps counterbalance the powerful force exerted by your legs.

Experienced race walkers pay attention to such things as breathing rhythm, walking speed, the angle at which the arms are carried and so on. As a beginner, however, you need be concerned only with developing a comfortable gait.

Where and when you walk are entirely up to you. How many miles you go and your number of weekly workouts depend on your condition when you begin. Sore arms and legs are to be expected after the first few walks, especially if you have underused those muscles for a long time. Excessive pain is a signal that something is wrong, and probably means you should see your doctor. (If you have had any heart problems, check with your physician before launching even a modest race walking program.)

Warming up
"It does more for your body than running does."

A good way to figure out how much walking is enough—and to keep tabs on your improving fitness—is to maintain a heart rate during your training periods of 75% of your maximum rate, according to Albert Marchetti. The maximum rate is the fastest at which your heart can beat under normal conditions *(see table)*.

Age	Maximum rate	Regular rate (75%)	Cardiac rate (70%)
28	192	144	134
32	189	142	132
36	186	139	130
40	182	137	127
45	179	134	125
50	175	131	122
55	171	128	120
60	160	120	112
65+	150	113	105

To take your pulse, use either the radial artery in the wrist or the carotid artery in the neck. Never use your thumb since it has a detectable pulse of its own that can throw off your count. To get as accurate an exercise rate as possible, Marchetti advises, take your pulse as soon as you stop walking. Count the number of beats in six seconds and multiply by ten.

Note: If you have a history of heart disease—a previous heart attack or any other cardiac abnormality—exercising at 75% of maximum might be too much for you. Instead, set 70% as your target. The same thing goes if you have a low resting pulse.

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ironment. Its accommodations, as you can see, are not merely luxurious, but genuinely sumptuous. And its niceties are very nice indeed. Power brakes, power seats, power steering, power windows, power door locks, and air conditioning, for example, are not optional add-ons. They are standard equipment. We invite you to advance to your Buick dealer, for a close inspection of the Electra Park Avenue. Then, buckle up your seat belt and pass "Go." Very, very comfortably.

Official Car of the XXIIIrd Olympiad
Los Angeles 1984

Wouldn't you really rather have a Buick?

Personal Affairs

(the average is about 78 beats per minute; 50 to 60 is low).

You can design a good training program and improve your style by joining a club. Walking clubs are usually headed by coaches or other fitness experts, who can offer all sorts of practical advice about technique, mileage, diet, etc. Race walking clinics are held weekly by clubs in many cities. To inquire about clubs in your area, write to Howard Jacobson, New York Walkers Club, 445 E. 86th St., Dept. F, New York, N.Y. 10028. For additional information on the sport, Metamucil, the laxative maker, offers a free booklet. Write to: Keeping Fit Over Fifty Years, Box 5110, Chicago, Ill. 60680.

Race walking may never catch on the way running has, if only because people are self-conscious about form. "Because of the movement of the body, a lot of people make fun of it," says Sal Corrallo. "You've got to become immune to that. You've got to smile at them, wave to them, invite them along."

But once they try it, they will discover it isn't child's play. And top competitors can really move out. Ray Sharp proved it at the Millrose Games at Madison Square Garden in New York this past January. The 23-year-old race walker, who is headed for the 1984 Olympics, caught up and passed the field after bending to adjust his shoe, accidentally jarred loose from behind by another racer. Sharp finished the 1-mile race in a record 5 minutes 46.21 seconds, a time that vast numbers of accomplished joggers will never achieve.

Points of interest

There's one at every cocktail party. No matter how good a deal you think you got on the car you just bought, he can top you. Or anyone else in the room. But do people ever talk about the loan rates they are paying on the cars they buy? A few percentage points may not seem like much, but over the course of a three-year loan they can amount to $1,000 or more *(see box, p. 178)*. And if you borrow money from yourself—using your portfolio, cash or insurance as collateral—that figure can easily top $1,500 over the life of a loan. Moral: While interest rates have supposedly been dropping over the last year, take a look at what banks are charging consumers. The rates are still sky-high *(see table)*. If you need a chunk of cash for anything from buying a car to paying a tuition bill, don't beat a path to your trusty bank.

The reasons consumer rates have not dropped along with the prime rate are matters of speculation. Banks can cite the high interest rates they now have to pay on money market-type accounts and other new types of accounts. Cynics will point to their portfolio of foreign loans. Whatever the reasons, the rates seem out of whack with the times. Here are some alternatives.

Insurance. Your whole-life or other cash-value policy can provide the cheapest loan to be found—if it's old enough. In most policies dating back to the 1970s and before, the annual rate ranges from 6% to 8%. Since 1981, policies have been sold with a variable interest rate, based on Moody's corporate average yield on seasoned bonds. Currently that rate is around 12.75%. Most recent policyholders, of course, won't have accumulated enough cash to make tapping that source worthwhile.

Auto financing agencies. Thanks to sagging sales, the major auto companies have been offering loans of 11.9% to qualified buyers. But as sales pick up, as expected, the auto credit agencies are likely to increase rates, probably close to the levels of what banks are charging. It's a good time to arrange a new car deal.

Brokerage houses. Thanks to deregulation, the lines between banks and brokerage houses have blurred so much it is hard to tell which is which. You can buy stock at many banks (sometimes at discount rates) and you can borrow money through many brokers (often at less than what banks charge). Merrill Lynch pioneered the Cash Management Account, and other major brokers have been forced to imitate it, among them Paine Webber, E.F. Hutton, Prudential-Bache and Shearson/American Express. To open a typical account, you must have $10,000 or more in cash or securities on deposit. (At both Prudential-Bache and Shearson/American Express, you

In whose best interest?

Here are recent loan rates offered by five large banks. Where there is a spread, it exists because of one of the following: the customer discount, the term of the loan, as with Bank of America, or the amount of the loan. The greater the amount, generally, the lower the rate.

	Type of loan				
Bank	Personal	Home improvement	Auto	Overdraft	Credit card
Bank of America	14¼-22%	14½-20%	15½-21%	19.8%	19.8%
Chemical Bank	18-19	16-17¾	15½-16	19½	19.8
Citibank	17-19	17-19	16-18	19½	19.8
Continental Illinois	17	16¼	16¼-16½	19.8	19.8
Amalgamated Bank (NY)	14¾	14¾	12¾-13¼	NA	19.8

NA: Not applicable

Brokers or bankers?

If you open a cash management-type account, you can borrow cash against your stock and bonds at very reasonable rates. But it takes at least $10,000 to open most accounts (only $1,000, however, in the case of Schwab & Co.) You can "borrow" that cash simply by writing a check or using your Visa or MasterCard, which automatically debits your account.

Broker	Margin rate
Merrill Lynch	9¾ to 11¾
Prudential-Bache	10 to 11
E.F. Hutton	9½ to 11¾
Schwab & Co.	10 to 11

THE REAL REASON TO BUY GOLD.

To many, the gold price these days looks attractive. nd thus it is not surprising to see a renewed interest in e metal.

But what is also not surprising is that investors might e overlooking something as they once again move into old.

In the past, many have bought gold for the short term ly—buying it low and selling at a higher price in a few onths or so, or maybe a few years or so. And, if it didn't erform right away they dumped it

This has sometimes been a good tactic, but it also nores the classic reason to own gold.

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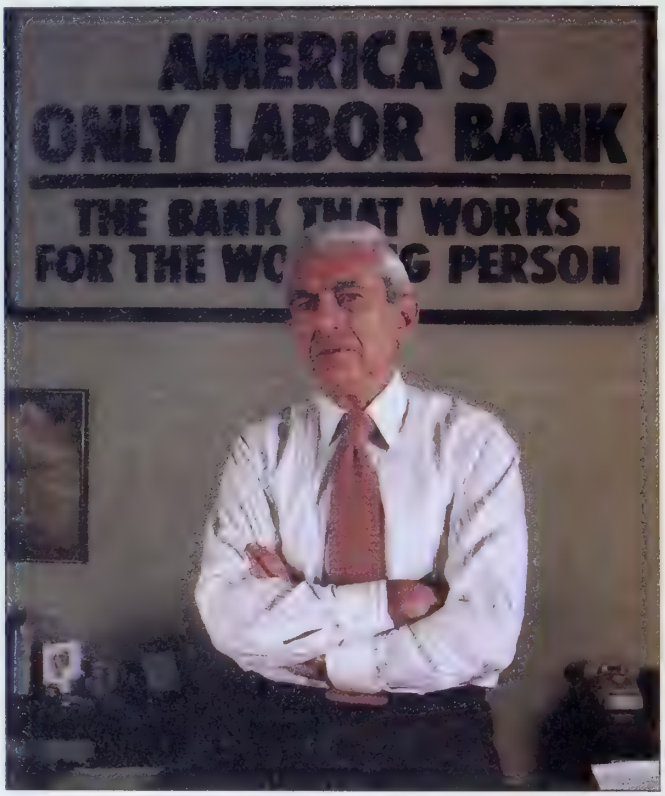
Personal Affairs

need $25,000.) You can write checks, write your own loans and, using Visa or MasterCard, even withdraw cash from cash machines. Discount brokers Charles Schwab & Co. and Fidelity, not to be outdone, have similar accounts but with lower minimums—$10,000 for Fidelity; and for Schwab, $1,000 in cash or $5,000 in securities. Typically, you can borrow up to half the value of your securities at will, without prior approval. Simply write a check, or use your Visa or MasterCard. And the amount of money you borrow—with no time limit—is charged to you at a few points above the broker call rate, which is now 9% to 9.5%.—**W.G.F.**

Union-made

At least one bank laughs out loud at the high rates charged by others—and tries to make hay out of them. Amalgamated Bank of New York, the only surviving union-owned bank in the U.S. (it is headquartered, appropriately, on dreary Union Square in downtown Manhattan), offers rates on personal and auto loans that are as much as 6.25% below those charged by other lending institutions.

Ed Katz, president and CEO of the 60-year-old, plain-Jane bank that is wholly owned by the Amalgamated Clothing & Textile Workers Union, loves to rub it in to his rivals. In a series of ads appearing on the op-ed page of the *New York Times*, Katz appeals to the small customers and savers other banks seem to eschew. One recent ad read: "A senior official of New York's largest bank managed to turn the clock back at least 50 years with a statement made recently to the *Times*: 'A person with only $200 or $300 in savings should not be in a bank,' he said, apparently because these small accounts are unprofitable. Where should such a person keep funds, he was asked. 'Back under the mattress,' he replied. We at Amalgamated emphatically disagree." Such ads have earned it the nickname "the hippie bank" and have won it lots of blue-collar depositors.



Amalgamated Bank's Ed Katz
No loans to Peru, thank you.

Amalgamated is no giant, but it's far from puny—its assets of over $1.25 billion rank it approximately 170th in size in the U.S., among the top 1.5%. Many unions deposit funds there, although customers need not be union members.

"The spread on what we charge and what the other banks charge has never been so great," says Katz. "The banks' cost of money is around 9%, yet their rates on consumer loans are as much as 19%. The consumer is getting the business."

Katz fairly preens as he points out the cost differences on auto loans recently offered by Amalgamated and competing banks in New York City. Assuming that $10,000 is needed to purchase a new car, and the term is for 36 months, a borrower would have to take out an installment loan at $12,084.59 from Amalgamated, at an annual rate of 12.7%. The dollar savings versus that at other banks ranges from $173.31 (Bank of New York, at 13.75%) up to $929.46 (European-American Bank, at 18%). Amalgamated's rates were about to be cut even further as FORBES went to press: 11.9% for American-made cars, 12.9% for foreign cars and 14.5% for personal loans (from 14¾%).

"Ours is the same money as Citibank's," quips Katz. "It's a mystery to me why people will shop like crazy to save $50 on a car's price, then throw $1,000 away on the financing."

Katz is also proud of the fact that Amalgamated is indeed a profitable bank, earning 0.9% on its assets last year. "And," he adds, "we don't have any loans to Peru."—W.G.F.

Not so fast, Clifford

Quick, what is the best way to finance your child's education? If you reply a Crown loan, a Clifford trust or using the Uniform Gift to Minors Act, congratulations. You have been paying attention to legitimate ways of transferring cash or other property to minors while they are very young, so those assets can accumulate with little or no tax penalty each year. And, in the case of the Clifford trust and Crown loans, you even get your principal back afte your youngster graduates.

But that is not necessarily the bes way to go, in the view of Robei Leider, publisher of Octameron Pres which produces a series of guides fo

the college-bound and their parents. "I think Crown loans are a lousy way to save for college unless mom and dad get a psychic satisfaction out of saving some taxes," he says.

Why is that? Well, Leider points out that colleges nowadays use formulas to determine how much money parents and students have to come up with to pay tuition, room and board and fees. The family payments are based mainly on the parents' income. But the portion based on their assets can also be significant, and it is here where parent-to-child loans come into play. "The big computer that decides how much a family must contribute in cash to a youngster's education places sharply different values on assets held by parents and assets held by the student. Parental assets are levied, generally, at 5% of value; a student's assets are taken at 35%." In effect, a student's pot of cash is "taxed" by the school at a much higher rate—seven times higher—than a parent's assets.

Example: Let's say you have $10,000 in cash right now, and your child is still a decade away from the campus. Your clever accountant says make a Crown loan (i.e., you give a demand loan of $10,000 to your youngster and let it accumulate interest in the kid's name until he or she graduates from college; then you "demand" the $10,000 back). Clever, but, says Leider, not the best way to go.

It remains true, of course, that if you keep the $10,000 in your own name and let it accumulate at 7% annual interest and you are in the 50% tax bracket, after a decade the account will read $14,106, whereas if the money is in your child's name, there will be much more—$19,655—in the pot as he heads for the halls of academe.

But now the college "taxes" the assets differently. The parents would have to pay only 5% of their own cache to the school each year ($705 the first year, $670 the second year, $637 the third year and $605 the senior year). The sum remaining would be $11,489.

But in the case of a Crown loan or Clifford trust, the student's $19,655 would shrink a lot faster since it would be levied at the higher rate of 35% annually. According to Leider, even though most of that money technically is a loan repayable to the parents, most college financial aid officers will see through the "loan" and treat the entire amount as belonging to the student. Result: The lump shrinks by $6,879 the first year, $4,472 the second, $2,906 the third and $1,889 the final year. That leaves only $3,509 in the pot, and the youngster is "obligated" to repay the parents $6,491 under the terms of the loan. And even if the youngster does repay that loan, the parents still net less than they would had they simply held on to the same $10,000 in the first place.

"You could argue that the lower contribution of the family which kept the money will not pay the college bill," notes Leider. But, he points out, that lower contribution will enhance the family's eligibility for a low-interest student loan. That loan, moreover, is made to the youngster—interest-free—while he is in school, and is repayable over a long term. In fact, a 20-year repayment period is now an option, thanks to the Student Loan Marketing Corp.

Moral: In setting up a Clifford trust or Crown loan, you could be outfoxing yourself. One option: Terminate the loan or trust two years before the student enters college.—**W.G.F.**

Perle would be proud

If business threatens to take you to the capital of the Sooner State, buck up: Oklahoma City (or O.K. City, as the natives call it) isn't exactly a cowtown. Builders are remaking the downtown core into a chrome-and-glass cavern worthy of Philip Johnson, and liberal interpretation of Oklahoma's quaint liquor-by-the-drink restrictions has paved the way for a handful of good restaurants and bars to keep the fabled steak houses company. (Many think this last vestige of the Prohibition era will be done away with entirely this year.)

Prominent among the attractions of the new Oklahoma City is the old Skirvin Plaza Hotel. Built in 1911 by an oilman-rancher named Big Bill Skirvin (whose daughter, Perle Mesta, was the celebrated Washington hostess), the Skirvin Plaza for years has been a center of Oklahoma City social and civic life. Belles still make their debuts in the hotel's Grand Ballroom, while their fathers cut deals in the meeting rooms. And last year the 209-room Skirvin emerged from a $10 million renovation that made it opulent enough to be listed as a Preferred Hotel, in company with Le Bristol in Paris, the Stanford Court in San Francisco and The Breakers in Palm Beach.

Unlike many small hotels that promise Old World charm but deliver Old World claustrophobia, the Skirvin offers big rooms full of modern furniture and amenities. There's plenty of charm, too: The two-story lobby, paneled in fumed oak and lighted by Venetian chandeliers, is a great place to sip a drink while a pianist plays hits of bygone eras. The food isn't bad, either: The Park Avenue Room serves a worthy steak, and—as an acid test—one recent visitor threw the kitchen staff into a snit by ordering eggs Benedict from room service at 10:30 p.m. They arrived, perfectly cooked, within 15 minutes.

If you or your company is feeling flush, reserve the Perle Mesta Suite on the ninth floor, where "the hostess with the mostest" stayed when she was in town. The suite is decorated in grand prewar style and, at a relatively modest $200 a night, is comparable to many double rooms in large cities. (Other room rates are similarly reasonable: singles run from $75 to $115; doubles go for $90 to $130.)

Underneath the hotel, grafted on to the tunnel system that connects the main downtown buildings, sits Skirvin Place, a small shopping area with four good restaurants and eight boutiques. You can even catch a ride to the airport in the Skirvin's white Cadillac limousine. All things considered, there are many worse ways to spend time in O.K. City.—**Anne Bagamery**

Dining room of the refurbished Skirvin Plaza Hotel
Still popular with debutantes and dealmakers.

Faces
Behind The Figures

Edited by Eamonn Fingleton

Real men take risks

When people politely ask Alex Brainard to put out his cigar, he often says no, and says it firmly. "Men who smoke cigars are clearly strong-minded, independent and maybe even macho," says Brainard, 56. He should know. He is president of Consolidated Cigar, the world's largest cigarmaker and the company behind brands like Muriel, Don Diego and Dutch Treats. "Cigar smokers," he says, "need to be able to weather dirty looks."

But according to Gulf & Western, Consolidated Cigar's former owner, in these days when real men *do* eat quiche and Phil Donahue and Alan Alda are lionized for their "sensitivity," there are a lot fewer macho men. The cigar market has been declining by 5% a year since 1965. Seeing no reversal in sight, G&W put the company on the block about a year ago.

Brainard and four other senior executives at Consolidated are betting G&W is wrong. Last month they bought Consolidated for $120 million, $119 million of which they borrowed (more than half from G&W).

What do they see that G&W doesn't? First, they are planning to cut production costs 25% on two of their major brands—Dutch Masters and El Producto—with new technology that will do away with the expensive whole leaves of tobacco that have traditionally formed a cigar's outer skin. They will substitute a new wrapper composed of tobacco fragments mixed with what Brainard delicately refers to as "extender"—really cellulose, coloring and flavoring.

"The process of making the wrapper is a little bit like making paper," says Brainard. "People who aren't very kind call it paper, but we prefer to call it tobacco."

How will real men take to the high-tech smokes? Brainard admits the taste will alter slightly but adds: "The connoisseur will notice and get mad and may go away from you. But we studied Phillies, White Owl and William Penn [cigars that are now made with homogeneous wrappers], and while they lost some people, they gained others." Brainard is also betting on the graying of America. Most cigar smokers are between 40 and 60, an age band now expanding as inexorably as baby boomers' waistbands.

After 30 years as an organization man (General Foods, then G&W), Brainard is eager for a change. "It will be nice not to have to answer to a planning group," he says. "We can spend our remaining work years truly enjoying what we do."—**Paul B. Brown**

Consolidated Cigar's Alex Brainard
Smokes go high tech.

Mr. Empire State strikes back

New York property king Harry Helmsley had been talking for years about trumping Chicago's 1,454-foot Sears Tower with a giant new Manhattan skyscraper. Then, with New York rents soft recently, there was silence. Now, however, he seems at least mildly bullish again. He tossed $65 million into property in December alone and plans to plow back more of his cash flow into the market later this year. So what is delaying his world-beater? "Interest rates," he says, rocking back in his tweed-covered executive chair. The prime rate may have fallen 10 points in the last 18 months, but that is not enough for Helmsley, who would not have accumulated his $750 million net worth without a gift for shrewd market tim

Helmsley-Spear's Harry Helmsley
No monuments to himself.

ing. "I would have to pay around 12% or 13% for long-term money today, and initially at least that wouldn't let me cover my costs," he says. "I want to borrow in single figures—maybe at 8% or 8.5%."

Rival property magnates doubt that even Helmsley, the wealthiest self-made real estate man in the Forbes Four Hundred, can afford such a spectacular gamble. The whole thing, they say, is Harry's little tease to give rivals sleepless nights. But Helmsley, 73, a rangy man who swims every morning and looks remarkably fit for his years, insists the new pile, costing an estimated $600 million, is for real. "I already have the site, in midtown Manhattan," he offers. "I don't own it, but I have a verbal agreement with the owner." Helmsley, whose Helmsley-Spear company already manages the Empire State Building, is short on the sort of details his rivals would consider persuasive.

One thing he is giving away for free: the new monster's height. "It will be 100 feet taller than Sears," he declares with satisfaction. The project's splashiness has raised some eyebrows. For the higher he goes, the bigger the proportion of space he has to allow for elevator shafts, thus cutting into Helmsley's all-important bottom line. Faster elevators will help him beat the problem, he says.

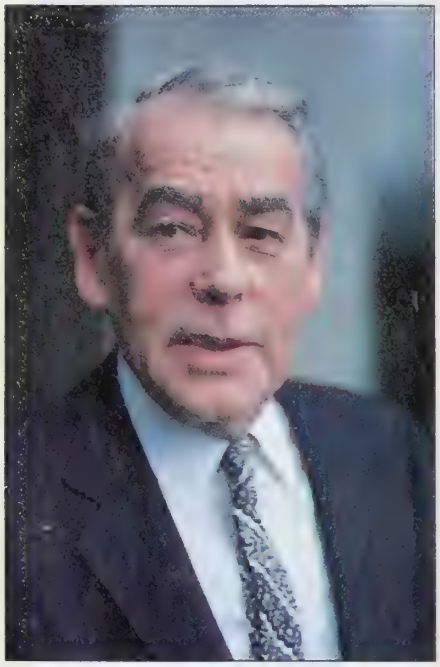
Even so, it is not like Helmsley, who began as an office boy in the management company that now bears his name, to build a monument to himself. His style has always been to snap up ho-hum secondhand buildings and turn them into gold mines with minimal expense. His modestly proportioned office, sited in an anonymous, elderly skyscraper near Grand Central Station, sets the tone: His only fripperies are three plastic tourist replicas of the Empire State Building. So far he has resisted moving to his flagship building, the more glamorous 230 Park Avenue. Says Helmsley: "I can't afford my own rents." —**E.F.**

New balancing act

The Paris-based International Energy Agency was created nine years ago, when oil prices were increasing and the only thing in sight was more of the same. Its primary mission was to share oil among its member countries, which consist of the U.S. and other oil-importing Western democracies, in the event of another oil scare. So, with oil prices now falling, is the IEA spinning its wheels?

Far from it, says Ulf Lantzke, the 56-year-old German-born lawyer who has headed the IEA since 1974. In creating the agency, Lantzke says, the basic objective was to stop the high cost of energy from putting a brake on economic growth. "We are still not in a position today to say that has been accomplished," he maintains.

Lantzke takes the long view. Low economic growth, he points out, has contributed heavily to the reduction in world energy demand. At the same time, it has slowed or forced cancellation of investments in nonoil energy like solar power and tar sands projects, which can take as long as 15 years to bear fruit.



Ulf Lantzke of the IEA
A new sense of mission.

A vigorous and lasting economic recovery will require much more oil to keep going, Lantzke reasons. And finite oil is still the only energy source that can readily be turned on. He expects that world oil demand in non-Communist countries will bottom out this year and start back up again in 1984.

So Lantzke sees the IEA's mission now as one of promoting "a balance among energy sources"—coal, nuclear, gas and oil—to prevent any single one of them from upsetting the energy basket.

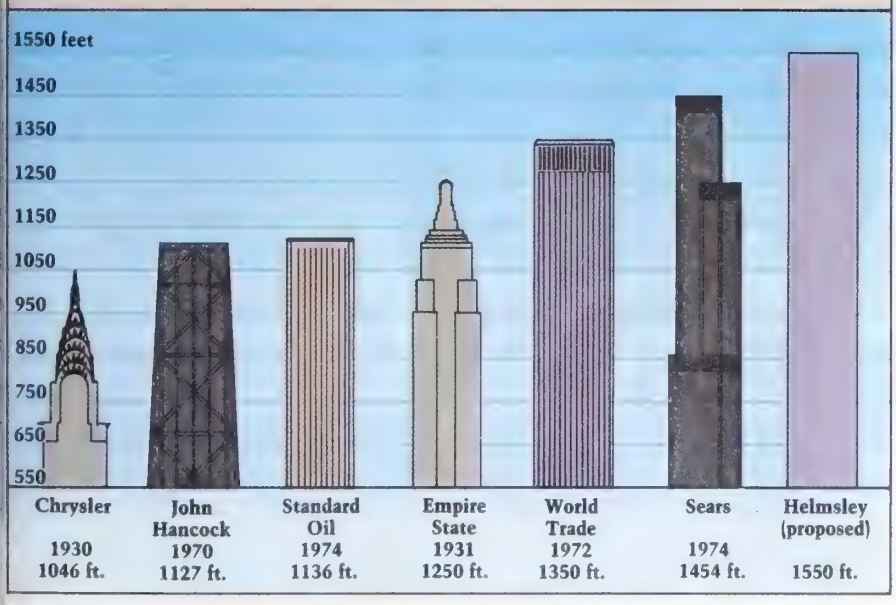
The IEA is stepping up R&D work on things like coal technology, enhanced oil recovery, solar power and nuclear fusion. IEA at present coordinates 45 projects, which are paid for on a cost-sharing basis by member countries. Lantzke is also spending more of his time on the interview circuit: "With energy you have to repeat your message every week. People just don't remember."

In the short term does he think oil prices have hit bottom? He says: "At $29 a barrel there is still a lot of spare capacity."

Should oil prices fall still further, Lantzke professes to have limited sympathy for the big oil companies that have been taking it on the chin.

Profiles in height

Helmsley's shadowy structure in New York City will be the fifth office complex to claim the "world's tallest" title since 1930. The taller you build a building, of course, the bigger the proportion of space you need for elevators. Helmsley hopes faster elevators will help.



Faces
Behind the Figures

Meanwhile, in a small way, he is already personally savoring the benefits of cheaper oil. He reports it now costs $29 to fill up the 55-liter tank of the high-performance BMW he uses at home in Bonn, where he commutes every weekend. A year ago it was $38.—**Carol E. Curtis**

In the Hindenburg's wake

Airships, we thought, had gone the way of the dinosaur. But Keith Wickenden, an amiable British businessman-cum-politician, reckons they are about to stage a spectacular second coming. He is chairman and a major backer of Airship Industries, a new blimp builder launched last month on the British equivalent of the U.S. over-the-counter market. So far, Airship Industries, which traces its roots to two fledgling airship companies that merged in 1978, has built one $2 million 164-foot prototype. Several more are in the pipeline, among them two for a Greek shipping company and one for the British government.

"Demand could be amazing—as many as 200 airships a year," Wickenden says. He hopes to sell airships to cargo carriers and to governments for coastal surveillance missions, but Wickenden gets most excited about the potentially lucrative passenger market.

Airships became the lepers of aviation in 1937, when the giant, hydrogen-filled German airship Hindenburg burst into flame upon docking at Lakehurst, N.J., claiming 35 lives. Wickenden's behemoths will be filled with helium, a lighter-than-air gas that was rare in the 1930s but is now abundant. Unlike hydrogen, helium is inert and therefore nonflammable. Also boosting hopes for a revival are improved weather-forecasting and more sophisticated engines, making the ships more maneuverable. Because the durable polyester construction of their gas bags is much lighter than the rubberized dacron once used,they are also said to be superior to the blimps that Goodyear built for the U.S. Navy during WWII and still operates for publicity pur[illegible]

Wickenden, 50, is a staunchly Conservative member of Parlian[illegible]

Airship Industries' Keith Wickenden and the law
Defying gravity—and the trade unions.

cheerfully risks trade union wrath by naming his ferries *Spirit of Free Enterprise* and the like. He controls roughly 12% of Airship Industries via the European Ferries sea passenger transportation company, of which he is also chairman. He sees the $3 million investment as hedging his bets on the future of sea transport. "European Ferries entered the business not because we wanted to make blimps, but because we wanted to be first to take people to the capitals of Europe by airship," Wickenden says, eyes lighting up.—**Rosemary Brady**

Reel profits

Major movie studios like MCA, Columbia Pictures and MGM have virtually had a lock on the business of marketing films and other programs to television stations. It is a hard business to break into. To lure the best products from independent producers, a newcomer must have big bucks for hefty upfront payments to producers. That, however, did not deter Michael Garin and Michael Solomon from founding Telepictures four and a half years ago. After borrowing $6,000 from Garin's mother, they rounded up

Telepictures' Garin and Solomon
The profits zoom, too.

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hat's what I mean, sir," you counter perately. "The phones, the mail. The 's great, but Rome's phones are a mess."

y now the old man's growing a bit ated. He continues to press you: "I'm ng about ROLM. R-O-L-M."

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Faces
Behind the Figures

$1.2 million in venture capital.

They dreamt up the venture after they met at a television trade fair in Cannes in 1978. Says Garin, 36, who got his start handling marketing and syndication at Time-Life Films: "We saw an opportunity to create an independent distribution company to parallel the explosive growth of the production by independent producers who had grown dissatisfied with the outlets they had." Translation: They realized independent producers were disenchanted with their traditional distributors, whom they suspected of favoring in-house productions.

Their gamble proved spectacularly right. New York City-based Telepictures' sales have zoomed from a respectable $8 million in its first year to $46 million in 1982. Aftertax profits last year totaled some $4.4 million and Garin and Solomon's stock in the corporation is currently valued at more than $11 million.

They started out with a lot in common. "We had both worked for huge corporations and recognized obstructions to growth within them," says Solomon, an articulate, former marketing man at MCA, Universal Pictures' parent company. "The person in the other office is afraid of you if you do your job well."

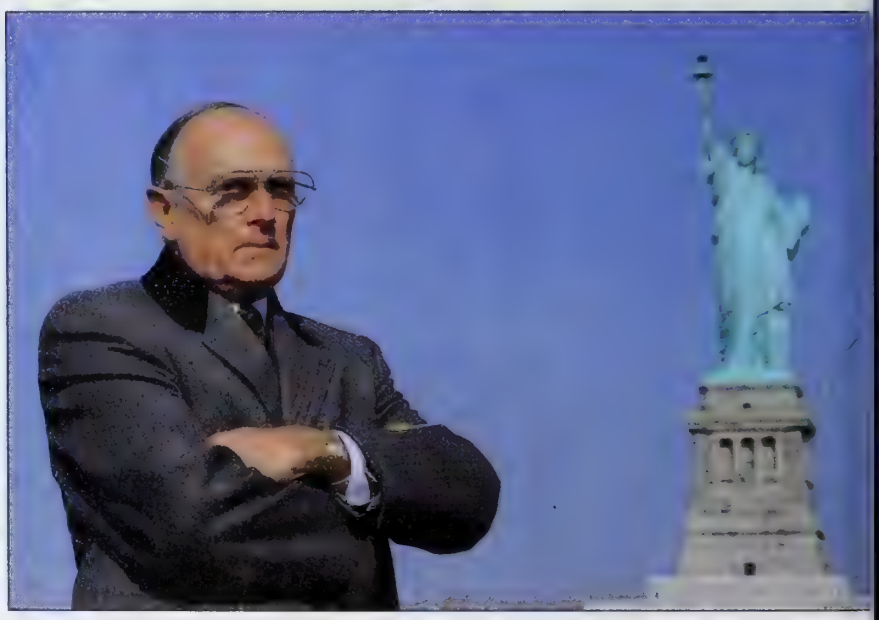
In retrospect, Garin and Solomon realize they could hardly have chosen a better moment to launch. By the late 1970s, the television industry was already in a state of fission, thanks to the rise of cable and the growth of independent producers, whose share of prime-time television had mushroomed to nearly two-thirds. They also had some lucky breaks with their merchandise. Two of their shows, "More Real People" and "People's Court," have turned out to be blockbusters, accounting for 75% of revenues last year.

Industry watchers like Roy Furman, who runs a Wall Street institutional research firm, give a lot of credit to Telepictures' aggressiveness. Says Furman: "One-on-one negotiations with hundreds of TV stations require outstanding marketing and promotional skills. And before that you have to convince producers you intend to stay around."—**Martin Love**

Give me your well-heeled

What a difference a century makes. When the Statue of Liberty was being planned in the 1880s, America's business class made the idea about as welcome as an interloper at a society ball. While the city's schoolchildren contributed their pennies, New York's complacent financiers stalled about finding their share of $270,000 needed to provide a base for the French-funded monument on Bedloe's Island (later renamed Liberty Island) in Upper New York Bay. They opened their checkbooks only after their stinginess was lambasted by newspaper proprietor Joseph Pulitzer.

A government-appointed commission now aims to raise $230 million to restore the statue and create a new museum of immigration at nearby Ellis Island. The campaign will climax in 1986, the statue's centenary, but already, according to campaign executive director J. Paul Bergmoser, the great and the good of American corporate life are lining up to be in on it.



Bergmoser and beneficiary
Big business to the rescue.

"This is one of the biggest fund-raising exercises ever, but we are confident from the responses we have had so far that we will meet our target comfortably," says Bergmoser, 67, a former president of Chrysler Corp. "About $200 million will come from corporations. We have already spoken to 17 or 18 potential major benefactors and they are all interested."

Bergmoser, a lifelong auto man (he worked for Ford before Chrysler), is organizing the campaign with all the élan of an old-style Detroit car launch. He aims to collect nearly half the total from only 25 sponsors. The will be designated "official" sponsor and are being lured with the promis of being able to key their advertisin and promotion to Statue of Libert centennial events. They will get firs refusal on television advertising tim in programs relating to the center nial. They can offer competitio prizes linked to the celebration. An they will be allowed to use the cam paign's logo in advertising and o packages.

Bergmoser reckons that companie in packaged goods and other consum er products are naturals for sponso ship. The Stroh beer company has al ready agreed to come in, paying "sev eral millions" for the privileg Coca-Cola, which funded the cam paign's startup costs, will almost ce tainly be a major sponsor—particula ly as its centenary happens to be 198 Bergmoser is also believed to be pres ing hard other companies with up coming centenaries—Westinghous and Johnson & Johnson among them

Meanwhile Bergmoser, who trace his roots to Germany on his father side and Ireland on his mother's, i working on dozens of projects aime at raising $30 million from the gene al public. He hopes banks and utilitie will include appeals in their mailing And he is planning a direct-mail ap proach to several million upscal households. The omens are good: test mailing of 40,000 drew a respons (with money) from 3.2%. As Ber moser points out, in the direct-ma business a response rate of 0.5% is p for the course. —**E.F.**

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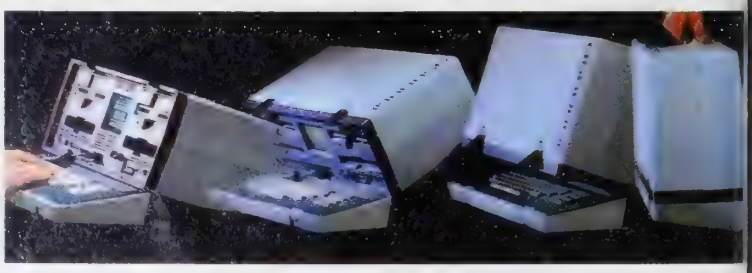

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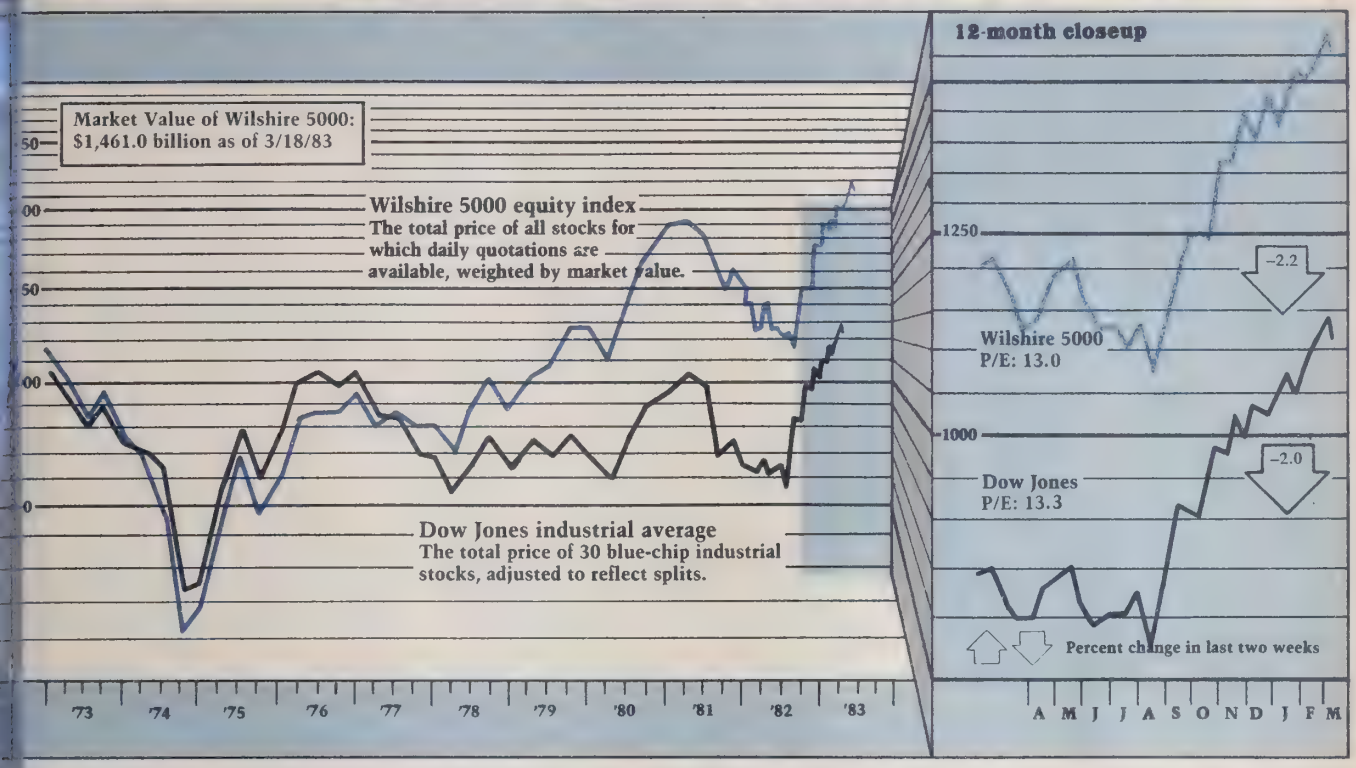


low idle. After gaining fairly steadily since the beginning of the year, the market took a bit of a breather. The last time every major indicator declined was in mid-December, and the market quickly returned to its winning ways. Is the current drop another relatively mild round of profit-taking? Or is it the beginning of the long-anticipated correction? The trend in interest rates and first-quarter earnings reports probably holds the key.

During the recent two weeks the Wilshire index lost 2.2%, and the Dow was down 2.0% on relatively light trading volume. By comparison, NASDAQ stocks slipped only 0.3%. While falling oil prices hurt the energy stocks as a group, the major oils were generally hit harder than the secondary issues. Thus, the Amex fell only 1.0%, while the entire energy sector dropped 6.2%.

The price-to-earnings multiple of the 25 Dow stocks that showed profits over the last 12 months hit a new high of 13.3. The blue chip Dow is now selling at a slightly higher multiple than the market as a whole. Will the rest of the market catch up, or are the blue chips finally getting ahead of themselves? Since these stocks are highly visible and widely held, the higher their multiples go the more vulnerable the entire market becomes—especially if reality can't catch up with optimistic expectations.

Close-up On The Equity Markets

Performance of six leading indexes

Percent change	Wilshire 5000	Forbes 500[1]	Dow Jones industrials	NYSE Composite	Amex Market Value Index	NASDAQ Composite
in last 4 weeks	1.3	–2.4	2.3	1.1	–0.7	1.4
in last 52 weeks	38.1	35.1	38.7	35.8	50.3	54.3

Stock performance based on five key investor yardsticks

Percent change	Volatility[2]		P/E multiple		Dividend yield		Growth profile[3]		Share price	
	high	low	over 25	under 5	over 7.5%	none	high	low	over $40	under $4
in last 4 weeks	2.6	1.8	0.9	6.3	3.0	4.4	2.3	2.9	5.0	1.8
in last 52 weeks	95.0	42.3	69.5	113.0	36.9	107.6	110.3	46.0	51.2	84.1

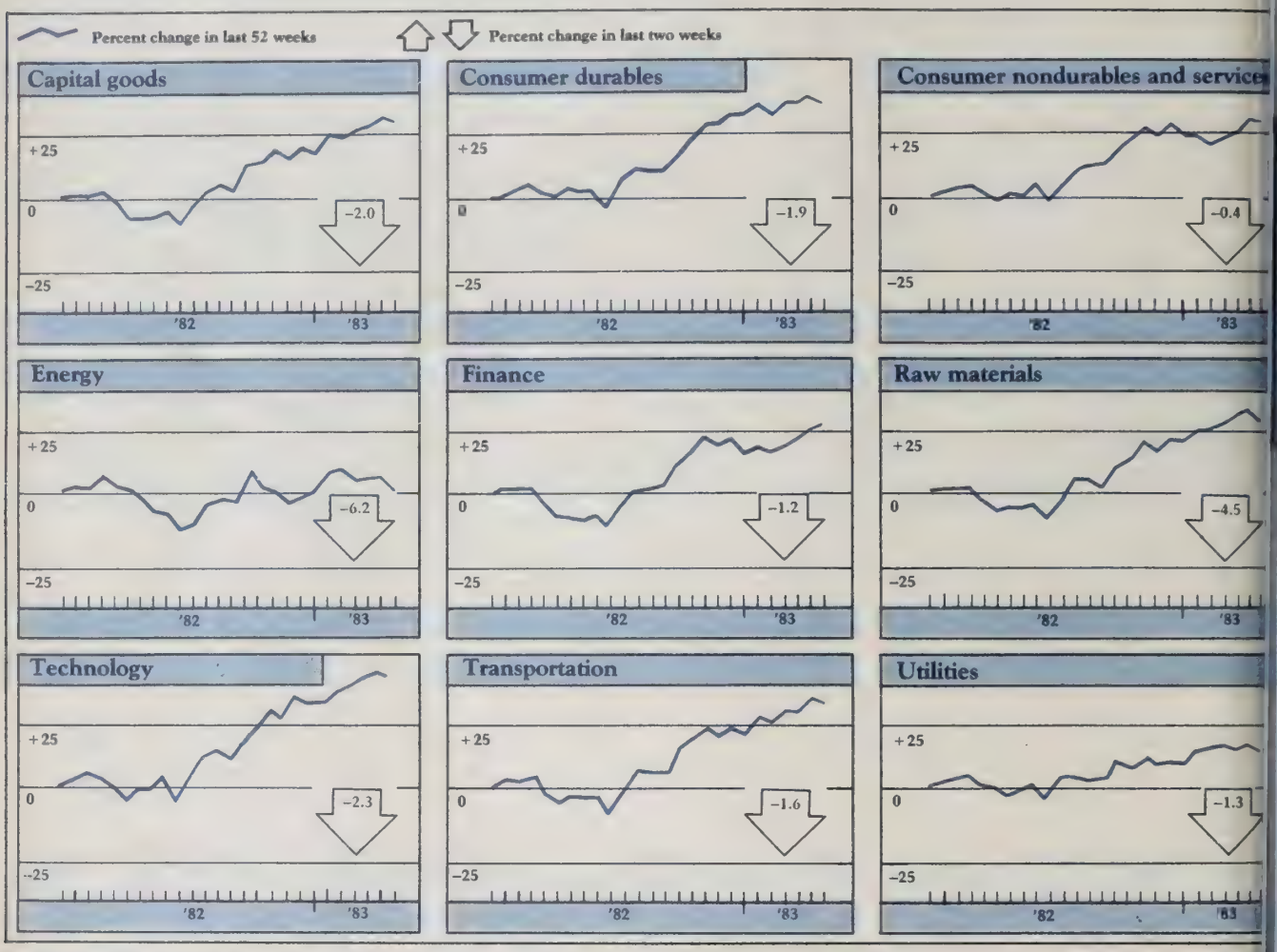
ased on sales.
stock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations, low-volatility issues are more stable.
quantitative evaluation of a stock's growth image, determined by Wilshire Associates.

ote: All data for periods ending 3/18/83. Prepared by Wilshire Associates, Santa Monica, Calif.

Where The Action Is

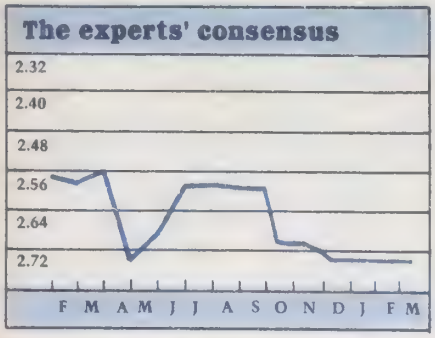
No favorites, really. Investors moved money out of all nine industry sectors over the last two weeks. This is the first time since the August rally that every group has posted negative results. With oil prices falling, energy stocks led the list of losers. But raw materials stocks—off 4.5%—were hard hit, too. Much of that decline can also be placed squarely in OPEC's lap. Several of the gold stocks in this group were sold off in response to the decline in oil prices.

The strongest group, on the other hand, was consumer nondurables. They fell a comparatively modest 0.4%. Why were these stocks the best of a bad lot? Perhaps some investors were cheered by the slim month-to-month decline in retail sales.



What The Analysts Think

Status quo. Analysts changed very few positions over the last two weeks. Perhaps they are waiting to see where the market moves before committing themselves. In the meantime, hard-hit energy stocks are still the favorites while the strongest group, consumer nondurables, is still sitting in last place.



Rank	Sector	Current opinion	Rank 2 weeks ago	Rank 4 weeks ag
1	Energy	2.66	1	1
2	Utilities	2.68	2	2
3	Technology	2.70	3	3
4	Capital goods	2.72	4	4
5	Transportation	2.74	5	6
6	Raw materials	2.77	6	5
7	Finance	2.81	7	7
8	Consumer nondurables	2.83	8	8
9	Consumer durables	2.89	9	9

Opinion ratings are ranked on a scale of 1 (strong buy) to 5 (strong sell). Data reflect the views of 200 institutional analysts. The consensus of opinion graph is the composite rating of 1,200 stocks, while the sector breakdowns correspond to industry gr graphed above. All figures are weighted for market capitalization.

Note: All data for periods ending 3/18/83. Prepared by Wilshire Associates, Santa Monica, Calif.

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Oil stocks have been slipping out of favor on Wall Street for nearly three years. Nothing can go down forever.

How long, O Lord?

By Steve Kichen and Paul Bornstein

In March 1981 we ran a feature on the integrated oils, arguing that they looked undervalued. Fifteen months later we featured potential bargains among oilfield service firms. What happened? Well, oil prices continued to drop, OPEC is struggling to survive and our "bargains" burned anyone who bought them. As a group, energy stocks have dropped 36% since October 1980.

Our only consolation is: If they were cheap then, they are even cheaper now. We've ranked them on the basis of percentage price declines from October 1980. Pay attention to earnings projections, relative cash flow and yield.

Sure, everyone is talking about oil gluts and drilling slowdowns, but look at the numbers. Even if current earnings estimates slide by 25%—something that is likely to happen as analysts recalculate on the basis of today's spot petroleum market—integrated companies like Exxon are still selling at 6 times 1983 earnings. That's half the current market multiple. Consider, too, the safe 9.9% yield, more than you can get these days from any money market fund.

Such comparisons are often less dramatic for independent and oil service firms. But they have other alluring aspects. The producers typically sport impressive cash flow ratios, and the suppliers are often high-tech outfits in disguise. What's to prevent someone from acquiring Petroleum Equipment for its cash or Hughes Tool for its scientific knowhow?

Now look at these companies relative to today's investment alternatives. If OPEC members cheat on their production quotas, oil prices

Integrated oils

Nearly all of these issues are selling at significant discounts from breakup value. Most companies also have modest leverage, competitive yields and below-market multiples based on 1983 earnings estimates.

Company	% change since 10/31/80	Recent price	Price range 1980 to present	Latest 12-month EPS	Latest 12-month P/E	1983 EPS est	Relative cash flow*	Book value/ share	Debt/ equity	Breakup value per share	Yield
Murphy Oil	−61%	20⅞	64 −15½	$4.31	4.8	$4.21	1.20	$22.04	42%	$ 36.90	4.8%
Standard Oil Ind	−47	39	99½–33½	6.25	6.2	6.73	0.96	37.58	32	125.15	7.2
Amerada Hess	−46	21⅜	54¾–15⅛	2.00	10.7	3.71	0.90	30.57	61	71.55	5.1
Standard Oil Ohio	−44	38	91½–26½	7.63	5.0	7.50	0.84	49.72	75	139.40	6.8
Phillips Petroleum	−41	30⅞	62⅞–23½	4.23	7.3	4.58	1.06	36.77	20	79.95	7.1
Getty Oil	−40	53⅜	108¼–41¼	8.61	6.2	8.83	1.27	58.10	13	167.45	4.9
Union Oil of Cal	−39	29	56½–21¼	4.63	6.3	4.91	1.20	23.69	26	95.25	3.4
Atlantic Richfield	−38	37¼	74⅜–32¼	6.61	5.6	6.98	0.82	35.89	43	136.95	6.4
Sun Co	−33	31¼	59⅝–26¾	4.49	7.0	5.20	0.92	41.99	47	108.25	7.4
Tesoro Petroleum	−33	15¼	32¼–14	2.34	6.5	3.17	0.61	28.82	3	38.95	2.6
Pennzoil	−31	35¾	62½–23⅝	3.60	9.9	4.28	0.95	22.77	81	61.80	6.2
Mobil	−30	26⅛	44¾–19½	3.31	7.9	4.28	0.90	34.45	25	92.15	7.7
Kerr-McGee	−29	29⅞	46½–22½	4.30	6.9	4.44	0.89	28.98	56	62.60	3.7
Ashland Oil	−23	28⅝	45¾–20½	4.64	6.2	4.18	1.09	36.78	79	28.05	8.4
Gulf Oil	−22	30⅞	54½–24¼	6.03	5.1	5.17	1.14	58.21	17	118.40	9.1
Exxon	−21	30¼	44⅜–24⅞	4.82	6.3	5.01	0.89	32.84	18	82.75	9.9
Shell Oil	−21	35¾	65½–27⅛	5.19	6.9	5.59	0.95	30.02	38	71.55	5.0
Tenneco	−21	33½	58⅜–22⅞	5.74	5.8	6.30	0.69	39.28	100	59.90	8.1
Standard Oil of Cal	−17	34⅞	58¾–23½	4.03	8.7	4.99	1.00	37.13	16	96.40	6.9
Texaco	−16	32¼	54⅜–26	4.92	6.6	5.52	0.83	55.20	20	134.70	9.3
American Petrofina	0	54	71⅞–41½	5.03	10.7	7.00	0.81	50.29	39	83.85	5.9

*An index measuring cash flow after deducting cash needs. Normal among 1,000 companies is 1.00. Higher scores are favorable.

Sources: Wilshire Associates; Standard & Poor's; Institutional Brokers Estimate System (IBES) of Lynch, Jones & Ryan; Nourse Associates; John S. Herold, Inc.

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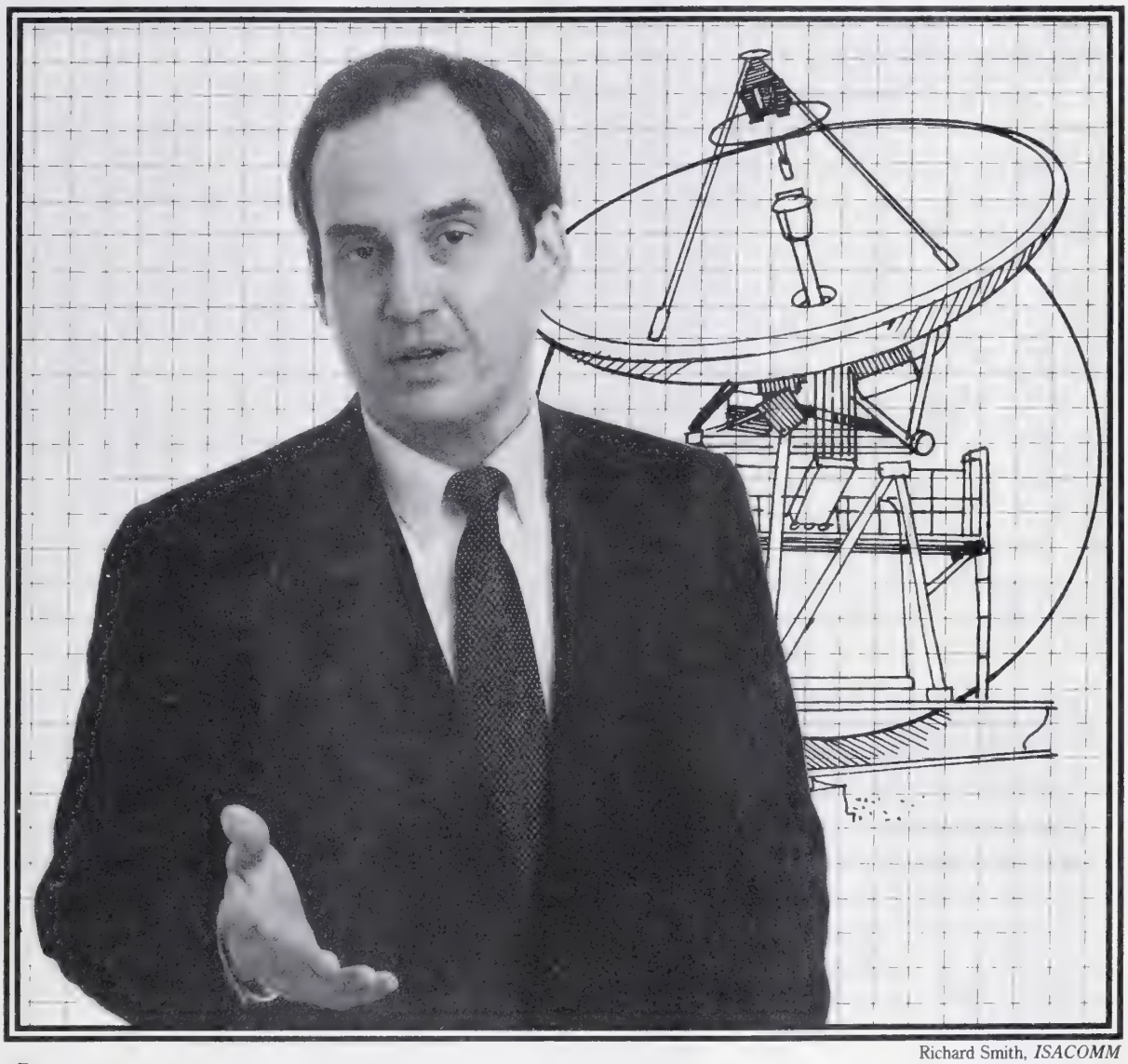

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Statistical Spotlight

could indeed tumble even more. But if tensions heat up in the Middle East, prices could rise just as quickly. More significant, energy companies typically have strong balance sheets. Not so for airlines and companies in other cyclical industries that are now Wall Street's darlings.

Finally, consider this: When the mood on Wall Street was at its darkest last spring we interviewed John Mendelson, Morgan Stanley's market timing expert. He was optimistic—wildly and correctly, as things turned out. (FORBES, *Mar. 29, 1982*). Now Mendelson is predicting a major move in energy stocks within three months. It will, he explains, encourage institutions to pour money into what is now an underowned sector for them, fueling the rally even more. "This group," he concludes "could become the bullish surprise of the year." Either that, or we are going to be wrong again. ■

Production and drilling

This group has fallen sharply since October 1980 and now most of these shares are priced close to their book values. Several have a favorable relative cash flow. But watch out for declining earnings estimates.

Company	% change since 10/31/80	Recent price	Price range 1980 to present	Latest 12-month EPS	Latest 12-month P/E	1983 EPS est	Relative cash flow*	Book value/ share	Debt/ equity	Yield
Universal Resources	–77%	5½	32⅞– 5	$0.73	7.5	$0.22	1.12	$10.93	9%	—
Petroleum Equip Tools	–74	5¾	34 – 5¾	1.23	4.7	1.00	3.80	9.91	35	—
Parker Drilling	–73	7⅞	36¾– 7⅛	1.99	4.0	0.62	1.16	10.87	69	2.0%
Unit Drilling & Explo	–72	5	34 – 4¾	1.78	2.8	0.70	NA	8.05	78	—
Sabine	–71	19	73 –13¼	1.54	12.3	1.44	0.86	13.22	44	0.2
Global Marine	–69	7½	36½– 7¼	2.71	2.8	1.98	0.60	12.81	97	3.2
Hamilton Bros Pet	–64	8¾	30⅛– 8¾	0.98	8.9	1.13	1.19	14.21	40	1.1
Helmerich & Payne	–59	16¾	54⅛–13⅝	2.70	6.2	2.18	1.11	12.02	32	1.9
Apache Corp	–56	9⅜	28¼– 7¾	1.20	7.8	1.35	NM	8.67	98	3.0
Ocean Drilling & Explo	–55	19½	54⅞–16	3.71	5.3	3.24	1.13	12.37	18	5.1
Reading & Bates	–55	11¾	39⅞–10	2.36	5.0	2.44	0.83	15.18	81	6.8
Moran Energy	–53	11¾	34⅞– 7⅜	1.09	10.8	1.11	1.10	10.92	67	1.0
Noble Affiliates	–47	13	32⅞– 8⅜	1.58	8.2	1.55	1.33	7.26	36	0.9
Rowan Cos	–47	9¾	23½– 7	2.36	4.1	1.56	1.20	8.24	22	0.8
Wiser Oil	–44	16	33⅛–13¼	1.37	11.7	1.60	1.02	9.29	0	5.5
ENSERCH	–39	19	40 –15¾	2.70	7.0	3.11	0.66	17.05	73	8.4
Atwood Oceanics	–35	21	46¼–16	6.57	3.2	6.14	0.79	17.18	76	—
Woods Petroleum	–35	21½	42¼–16¾	2.13	10.1	2.44	1.39	8.70	15	2.8
SEDCO	–24	27⅛	49 –23¼	3.86	7.0	5.70	1.83	12.64	62	1.9
Belco Petroleum	4	26	36⅜–17⅛	4.29	6.1	4.60	NM	21.84	11	2.7

*An index measuring cash flow after deducting cash needs. Normal among 1,000 companies is 1.00. Higher scores are favorable.
NA: Not available. NM: Not meaningful.
Sources: Wilshire Associates, Standard & Poor's; Institutional Brokers Estimate System (IBES) of Lynch, Jones & Ryan; Nourse Associates; John S. Herold, Inc

Equipment and services

With the decline in drilling, business is off for most of these firms. But some analysts expect these stocks to rebound well before the demand for oilfield supplies hits bottom. Thus, they could be good buys.

Company	% change since 10/31/80	Recent price	Price range 1980 to present	Latest 12-month EPS	Latest 12-month P/E	1983 EPS est	Relative cash flow*	Book value/ share	Debt/ equity	Yield
Newpark Resources	–74%	6	33⅛– 4¾	$0.57	10.5	$0.16	0.69	$ 9.72	11%	2.7%
Weatherford Intl	–74	8⅞	38⅞– 8	1.33	6.7	1.13	1.09	11.54	40	4.5
Aztec Mfg	–59	7¾	28⅛– 6¾	1.32	5.9	NA	1.76	5.79	3	5.2
Hughes Tool	–57	16½	48⅝–14⅜	2.65	6.2	1.96	0.86	20.94	36	5.1
Smith Intl	–57	21¼	70¼–18	3.61	5.9	2.51	0.88	27.07	24	4.5
Baker Intl	–56	17⅜	53½–16¾	2.73	6.4	1.76	0.98	14.03	31	5.3
Halliburton	–55	30⅜	86½–21	4.21	7.2	4.29	1.50	26.89	23	5.3
NL Inds	–53	14⅝	48⅝–14¼	2.90	5.0	1.84	0.98	17.51	43	6.8
McDermott Intl	–49	17⅞	46⅝–14¾	2.86	6.3	2.12†	0.67	32.09	36	—
Schlumberger	–47	38½	87⅛–30	4.60	8.4	4.67	1.53	15.46	6	2.5
Tidewater	–47	20¾	54⅜–15½	3.63	5.7	3.45	0.99	19.09	60	4.3
Zapata	–45	14⅞	39⅝–11⅝	4.75	3.1	3.73	1.20	18.31	105	5.6
Petrolane	–35	13⅜	26½–10½	1.54	8.7	1.51	1.24	8.38	40	3.7
Camco	–19	12	22⅜– 8	2.48	4.8	2.45	0.93	8.50	33	2.0

*An index measuring cash flow after deducting cash needs. Normal among 1,000 companies is 1.00. Higher scores are favorable. †Fully diluted.
NA: Not available
Sources: Wilshire Associates, Standard & Poor's, Institutional Brokers Estimate System (IBES) of Lynch, Jones & Ryan, Nourse Associates; John S. Herold, Inc.

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Stocks and bonds are performing beautifully . . . but here are some investment pros excited about great buys in real estate.

Bricks and mortar, anyone?

By Dero A. Saunders

BACK IN 1975 Claude N. Rosenberg Jr., a man with a reputation for investing in common stocks, made a move into real estate. Rosenberg's San Francisco-based money management firm launched a family of closed-end funds aimed at attracting long-term pension money. The timing was splendid, as real estate seemed like one of the few investments able to stand up to inflation.

Rosenberg Real Estate Equity Funds now has assets of $1.5 billion. That's a major addition to the nearly $4 billion in stocks and bonds that Rosenberg's own firm manages, and its approach to real estate has won a considerable following among professionals. Still, you would think bricks and mortar would be much out of favor today. Property values, after all, have slumped in recent months.

But the folks at RREEF see this as an opportunity. "In the last 15 months real estate has turned into a buyer's market," says Paul Sack, the 55-year-old former developer who helps manage the funds. "In 1980, for example, RREEF West IV was a $60 million fund we thought we could invest in a year. It took 2½ years, because we could not find properties to meet our standards. But in RREEF West V, a $75 million fund we launched in 1982, we invested $40 million in less than a year."

Why is Sack's job now easier? "High interest rates have driven most of the leveraged buyers out of the market," he explains. "And other considerations have driven a number of unleveraged buyers out. We've toughened all our investment criteria, and we're still buying more properties."

RREEF still shops extra carefully even in today's buyer's market. Its funds have a ten-year life cycle, so the object isn't quick turnover. Rather, Sack wants to hold assets long enough to change their value. Says Alander (Sandy) Hogland, an ex-Coldwell Banker man who became one of RREEF's founding principals, "You have to be able to massage the assets, let the leases expire and recast them."

RREEF founders Rosenberg, Bogart, Hogland and Sack
Deflation may not be all that bad for real estate.

To find such opportunities, RREEF's 11 acquisition principals usually hunt in pairs and cover every major U.S. real estate center at least once every two months. They haunt trade organizations and brokers' offices, seeking to buy the right five-to-ten-year-old commercial properties below reproduction cost. "Being knowledgeable and having a good background in real estate," says Hogland, "we can recognize a good building and a good price when we see one, and we're not afraid to make an offer out in the field. Real estate is a disorganized market, which presents opportunities. If you can buy a high-rise office building for $100 a square foot that you would be hard-pressed to replace for less than $150, you just know it's a waiting game until you can get your rents up"—and with them, of course, the resale price.

RREEF usually manages its assets with its own staff. This saves money by avoiding the hefty cut a hired manager takes on lease renewals, but more important is management quality. "An outsider may keep the parking lot clean," says Paul Sack, "but he doesn't give you the long-range planning necessary to maximize value."

Sack, a Harvard M.B.A. with a Ph.D. in economics from the University of California, also has some thoughtful observations on the *theory* of investing in real estate. Why, for example, should pension funds put money into property at all when the stock and bond markets are roaring ahead?

As a hedge against future inflation, argues Sack. "Real estate is the best protection against inflation rates of 7% or more," he explains. "When you get down to moderate rates—say, 4%, 5%, 6%—stocks do very well. But at over 7%, both theoretically and historically, real estate outperforms other vehicles."

How likely are we to see that kind of inflation again soon? Sack puts the chances between 40% and 60%: "At a meeting of our clients recently, two-thirds of them predicted a 7% rate again within the next decade."

But what if inflation is licked? "A funny thing happens," says Sack, "at *very* low inflation rates, say, 0 to 3%, where it was when I got into the business in '58: Real estate reverts to being a fixed-income security. It traditionally sold at about 150 to 200 basis points above, say, a Baa bond, a payment for the lack of liquidity."

The 7% inflation RREEF expects may not be good news for the economy, but it does indicate that some real estate at today's prices might be a very good long-term investment. ■

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Great expectations

By Barbara Ettorre

JOHN WESTERGAARD, 51, has had plenty of ups and downs in his 25 years as a vocal proponent of small-growth-type companies. When this kind of stock is hot, Westergaard rides high. When it is out of favor, so is Westergaard. Right now, small stocks with any kind of story are hotter than pistols, and Westergaard has decided to cash in by starting his own mutual fund. This, in addition to producing his investment letter for subscribers and managing growth stock portfolios for 71 institutions and private individuals. At the end of March, Westergaard's research firm, Equity Research Associates Inc. (wholly owned by Ladenburg, Thalmann & Co.), filed for registration for The Westergaard Fund with the Securities & Exchange Commission. But investors would probably do well to think twice before entrusting substantial sums to Westergaard as some sort of miracle man in the hot stock area.

The new fund will, of course, go heavily into what Westergaard calls "junior growth companies." But there's a big difference between this and any other growth fund. Westergaard is going to leverage the fund, and he is going to sell short at times. According to a preliminary prospectus, the fund could take short positions that would amount to as much as 25% of its net assets. The fund could also borrow amounts up to 25% of those assets.

Which means that Westergaard has lots of chances to go wrong. The proposal looks suspiciously like a hedge fund, and that's very close to what it is, in reality. "We are at the edge of the spectrum of money management here," Westergaard proclaims. "With the capacity to borrow and go short, we are approaching the private hedge fund type of management. It will be probably as far left as anything you're going to find in mutual funds today."

Westergaard says it is "essential" that his fund hedge in down markets. He acknowledges risks in shorting, but in a market as volatile as this one, he argues, it's even riskier not to hedge. Westergaard claims he will manage the portfolio, long, short and leveraged, on a contrarian basis, with some sorties into special situations. These would not necessarily be limited to growth companies of under $100 million in sales.

Stock picker John Westergaard
An old dog studies new tricks.

Westergaard says he's not nervous about operating in the public eye as a mutual fund operator because, as a letter-writer and portfolio manager, he is "basically used to operating in the public arena." Westergaard says the average value of his investment management accounts (some $50 million worth) was up 41% last year.

Investing $50 million of private money, nevertheless, is a bit different from managing, say, $100 million (Westergaard's target for the initial underwriting) for a disparate group of investors. The minimum order during the underwriting—being handled through Ladenburg, Thalmann—is only 100 shares. At the offering price of $12.50 per share, that's only $1,250. Essentially, therefore, he's after smaller investors and he's bringing them in rather well into the game. Quotron, for example, a 1979 Westergaard recommendation at 4⅛, is now 42; Sensormatic Electronics, another Westergaard tout in 1977 at 2¼, is now 46.

All this suggests a fundamental question: Why form a mutual fund when the field is getting crowded with similar new competitors (Fidelity and Putnam are two that come to mind) seeking emerging growth stocks? Meanwhile, T. Rowe Price New Horizons, the pioneer in the business, has passed the $1 billion mark in assets. In short, fund buying already may have precipitated an unsustainable runup in small company stock prices. Who needs another fund these days?

The small investor, says Westergaard. "It's not that the public is coming back to mutual funds as much as it is a whole new public out there," he says. "There are 35-to-40-year-olds making serious money, with a growing interest in common stock investing." Westergaard advises young person to invest 20% to 40% of his assets in an "aggressive growth fund." Naturally he wouldn't mind if it were the Westergaard Fund. Westergaard expects the fund to be registered by early June.

To avoid conflict, he says, his newsletter is being "repositioned." It will make "very few if any," buy and sell recommendations but merely provide reference material, as Value Line and Standard & Poor's do.

Yet another question remains. Here's a man whose professional life largely has been devoted to picking small companies on fundamentals. Can he adapt to the world of hedging? On that score Westergaard has no particularly persuasive claim to superiority. And, despite the theoretical beauty of leveraged hedging, very few portfolio managers have proved themselves so brilliant at it. Shades of Fred Carr and his troubled Enterprise Fund of 1970—and that wasn't even a hedge fund. ■

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What is behind high-flying Convergent Technologies? A simple insight and a salesman's drive—that's enough so far.

The customers raised their hands

By Kathleen K. Wiegner

ABOUT TWO YEARS AGO Allen Michels, the ebullient president of Convergent Technologies, received a visit from William Hambrecht, partner in the premier venture capital firm Hambrecht & Quist. Hambrecht was checking Michels' microcomputer startup company with an eye to investing.

"He asked me," recalls Michels, " 'Who are your customers going to be?' Well, we didn't really know. We started the company with the conviction that certain products would be needed in the future and we would do those products. We would then announce them to the world and the customers would raise their hands."

Which is exactly what happened. Burroughs Corp., looking for a way to quickly update its office offerings, has already purchased 10,000 Convergent computers, accounting for 48% of 1982 sales. NCR decided Michels' machines were just the thing for its Worksaver word processing system.

Convergent Technologies' Allen Michels
Processing is cheap, so all can share.

The French company Thomson-CSF came in for a minimum of $10 million worth by next year. And C3, Inc., which sells systems to defense-related agencies of the U.S. government, also became a big Convergent customer (11% of 1982 revenues).

From $351,000 (sales) in 1980, Convergent's revenues grew to $96 million last year and could top $200 million this year. Earnings last year were $11.9 million. Convergent went public last May, selling 4.4 million shares at $13.50 each, and last month sold 5.4 million more shares at $27.50. There are roughly 3 million low-priced warrants held by big customers, but still the stock remains high at a recent price of $28, or 66 times 1982 earnings.

What is Convergent Technologies? It is the result of a simple insight, following two decades of experience. A 42-year-old physicist, Michels spent four years with North American Philips and then found his niche in marketing and sales at Digital Equipment. "At one time I had aspirations of becoming an Einstein—without hair," says the balding Michels. "But an early awareness of severe intellectual limitations, to say nothing of financial ones, made me realize I had to be practical."

When Michels' wife refused to live any longer in New England, he left DEC, moved West and joined Intel. There he realized where the computer business was going.

"The traditional computer," says Michels, "whether a huge mainframe or a minicomputer, was predicated on the notion that processing power and memory are expensive, so one ought to share that processor as much as possible. But in volume, 16K chips cost less than a buck, and a 16-bit microprocessor runs for $25 to $30."

The implications were obvious: Companies could afford to give employees individual processors, enabling them to work both independently and in concert. Instead of having a lot of terminals hooked up to a giant computer, Michels gave his customers a lot of powerful desk-top computers, with one acting as a "master computer." Attached to the master are as many as 16 computers where users can draw simultaneously on the same database, mass storage and peripherals. The master computers can also be hooked together and connected to a larger computer.

Michels' Convergent systems are, in effect, work stations, but simple ones selling for about 20% less than Xerox' more elaborate Star. Other companies—among them Altos Com-

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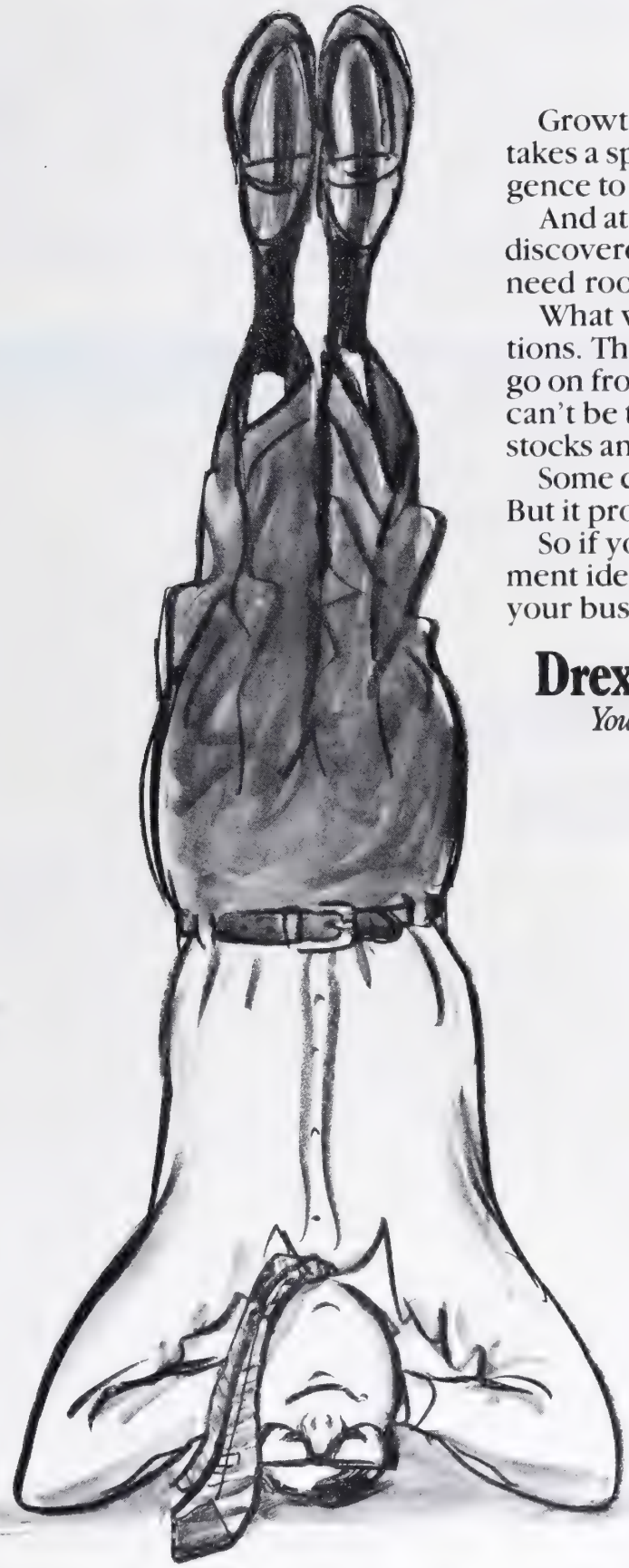
ow our analysts come up with them is their business.



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puter and Fortune Systems—have come along with a Convergent-like product, but Michels was first and, he says, unique.

He started the company in 1979, initially with $2.5 million in private funds. Venture capital from Hambrecht & Quist and Cable & Howse Associates came later. Convergent soon signed up Burroughs and NCR as customers. Today the two companies account for 65% of Convergent's volume. They also hold 2.3 million warrants to buy Convergent stock at about $6.50 a share. The warrants are exercisable after purchase of a certain number of Convergent machines. This idea—the brainchild of NCR—was designed to establish a strong link with important customers in the very early days of the company.

It's been a good deal for both sides. Burroughs, for example, sold 750,000 of its shares in the most recent public offering for $19.7 million. It had paid Convergent $3.5 million for those shares.

The big customers hold something else as well—the rights to manufacture Convergent's products under license. Michels thus must keep Convergent's costs coming down and its product ahead of the field as a disincentive to his big buyers doing it themselves. He has two different products in the works, a 32-bit microcomputer called, extravagantly, the Megaframe, and a portable computer.

Keeping ahead is expensive. Mi chels poured more than 19% of his rapidly growing sales volume into re search and development last year Still, it appears to be paying off: Las month Prime Computer signed up fo Convergent's work stations for its of fice automation effort.

"The road ahead," says Michels, "i challenging." There is competition from Wang, IBM and DEC as well a startup companies. But let's not for get, those big companies were in th computer business for decades befor Al Michels, and yet he came up with the simple idea that built Convergen and earned him a paper fortune of $3 million. Good ideas and hard wor still pay off. ■

The Funds

New sales had been flooding into the Sequoia Fund, until its managers turned off the tap. They'd rather be wrong in their own way than right in somebody else's.

Embarrassment of riches

By Richard Phalon

YOU CAN'T COME AWAY from a talk with William Ruane and Richard Cunniff without getting the idea that the Sequoia Fund, which they founded in 1970, will stay closed to new investors for a long, long time to come.

"I would be surprised to see the fund opening soon," says Ruane, chairman of $280 million Sequoia. "I wouldn't be surprised to see it still closed five years from now."

It's a man bites dog story. Since his own earnings are keyed to the amount of assets he runs, it is rare for a fund manager to turn down sales. It is rarer still for a manager to pull out of the closet a potential conflict between his own ends and the objectives of his shareholders: Is there a point at which a fund can get too big to produce better than average gains in asset value?

Bill Ruane and Rick Cunniff certainly think so, and they are putting their money where their convictions are. Besides closing down Sequoia to new investors, the two also decided not to take on new accounts in their private portfolio management business covering another $250 million in assets. "If I had a million dollars to manage, I'd do a hell of a lot better than if I had $100 million, and if I had a billion, I'd just be making things that much harder for myself," says Cunniff.

Thanks to its own consistently good performance and the renewed interest in mutual funds stirred by a runaway stock market, Sequoia was almost buried in an avalanche of new money last year—some $67.4 million—that boosted the fund's assets by 50%. Most fund managers would have found that as jolly as the jingle of an old-timey cash register. Not so Ruane and Cunniff. They responded, two days before Christmas, by ringing up no sale. "The decision to discon tinue sales to new investors," the told shareholders, "reflects manage ment's belief that unrestraine growth might impair investmen flexibility and would not be in th interest of existing stockholders."

Ruane and Cunniff think that big i particularly bad for their investmen style. Fundamentalists in the Benja min Graham mold, they like to con centrate on undervalued companie that have escaped the notice of othe analysts on The Street. Sequoia doe not make a fetish of diversificatio The Ruane-Cunniff strategy is to tak sizable positions in comparativel few companies and, often as not, i small companies. Many small compa nies have relatively little stock floa ing around in public hands and a ten dency to be highly volatile on bot the buy and sell side. "It takes a lot o research and a long time for us t come to a conviction about a com pany," says Rick Cunniff, "and it ca take a hell of a long time to accumu late stock without driving up price There are definite limits to what yo can do with a lot of money."

The float in some of Sequoia's hol ings is so thin that the stocks occa sionally seem to trade only by ap pointment. Three advertising compa nies, for example—John Blair & Co Interpublic and Ogilvy & Mather- account for about 8.7% of the fund assets. At last report, Sequoia's prof in the group was almost twice its $7 million investment. The profit is du largely to values that The Street di covered well after Ruane and Cunni made their move.

The fact that the stocks are in bris demand and tight supply hasn't hur John Blair & Co. is a good example

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the dynamics Ruane & Cunniff like to play. Sequoia and the privately managed accounts own a total of 13% of the company. Other institutional investors own another 23%, and there were days, says Cunniff with a certain amount of hyperbole, "when the stock traded as little as 300 shares." Lately, volume has picked up, and John Blair is currently selling at around $53 a share. Sequoia's average price: $19.60 a share. The pattern is much the same not only in the other advertising stocks Sequoia owns but in such other holdings as the Glatfelter Co., a Pennsylvania-based paper company, and Meredith Corp., the Des Moines family-controlled publishing company. "If you pump a lot of money all at once into stocks like that," says Cunniff, "all you do is heat up the market."

At the moment, Ruane and Cunniff think that stock prices generally have been heated to the point where bargains have become a lot harder to find. That was another reason for cutting off new sales. Sequoia has been very cautious. It is only about 64% invested in stocks. The balance of the portfolio is in Ginnie Maes (13.7%) and short-term governments (22%).

Thanks to declining interest rates, the fund has been getting a good return on the Ginnie Maes, but the heavy cash position has put it out of sync with one of the biggest market runups ever. Performance has su fered. Over the five years ended i December, Sequoia ranked in the to 20% of the 568 funds monitored b Lipper Analytical Services. In the yea ended in December, however, Sequoi slipped almost to the top 30%; so f this year, net asset value a share, no counting capital gains and incom distribution of $2.09, has droppe slightly—from $31.96 to $31.77.

That's not the worst showing in th world, but it seems to prefigure th kind of diminishing return tha Ruane and Cunniff have in min when they contend that an emba rassment of riches often means en barrassing performance.

Is the problem they pose only a p culiarity of Sequoia's style, or is it generalization that investors shoul keep firmly in mind when they buy fund? Is big necessarily bad, and sma beautiful?

Not if you talk to someone lik John Neff, who manages the $1.3 bi lion Windsor Fund with a hand that one of the surest in the business. "O average," he says, "if you look a small and large funds, they perfor about the same over the years. There been lots of noise about size over th years, but little evidence."

With the exception of Windso however, few of the biggest func have made the FORBES annual hono roll over the last five years, and Wind sor itself hasn't shown up there sinc 1979. Of the 19 funds on the list las year, 6 were under $60 million in a sets and only 6 were bigger than $15 million. Even big fund advocates hav to concede that small funds on th whole have vastly outperformed larg funds in the last five years.

It may well be that the small func have the edge not for any inherer advantage but because they have bee where the action is—in small growt companies where they can take meaningful position. Large funds, fo the most part, deal in big lots and ten to concentrate on big capitalizatio stocks that offer the advantage of ma ket depth and liquidity. "Everythin depends on style," says Bruce John stone, who manages the Fidelity Equ ty-Income portfolio. "In the growt area, you can see where funds in th $100 million range got to $2 billio and performance slipped."

Whether they are pondering fashio or firm principles, Michael Lipper o Lipper Analytical thinks there migh "be a few other funds around" that ar weighing the Sequoia option. Wit Rick Cunniff, they too may decide tha "we just don't think we can operate a well with too much money." ■

Richard Cunniff and William Ruane
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March 4, 1983

A lot of issuers of high-coupon tax-exempts want to reduce their debt service. "Prerefunding" is one way to do it.

OH, WHAT A LOVELY WORD

By Ben Weberman

Back in 1975, the good citizens of Fort Collins, Longmont, Loveland and Estes Park, Colo. set up the Platte River Power Authority. Through the end of 1982, it issued $325 million worth of bonds, including some very high-yielding tax-exempts.

Take Platte River's term bonds, maturing 2002 and 2012 and issued in February 1982, for example. They carry coupons of 14% and 14⅛%, yet are high-quality bonds rated A-1 by Moody's and A-plus by Standard & Poor's. The offering was sweetened by ten years of protection from early redemption.

At the time, Platte River did not have much choice. Remember, projections at the time were for double-digit inflation. Now interest rates have come down sharply. Equivalent Platte Rivers sell to yield, not 14% and up, but 9.85%.

So last February the power authority issued a new series of bonds carrying coupons of 9.75%. It will use the proceeds to pay off those high-cost 14s and 14⅛s. The older bonds can't actually be called until 1992, of course, because of the no-early-redemption feature. So Platte River "prerefunded" them.

It's a beautiful word, prerefunded. What does it mean? Platte River will buy U.S. Treasury securities with the proceeds from its newer, lower-coupon offering. The Treasury securities will be held in escrow until the first call date through a fiduciary bank. Then the Treasuries are sold, and proceeds are used to pay off the old 14s and 14⅛s. The authority actually makes a profit, too, because the Treasuries earn more than the cost of the money raised to buy them.

The result: Platte River has reduced its debt service by the difference between the old coupon and the new coupon—plus the arbitrage profit. But there's also a benefit for bondholders. The price of the prerefunded bonds jumps, usually by 10 to 11 points—even more, sometimes. Why? Because they are now backed—collateralized—by U.S. Treasuries. If you bought them in 1982, you now have a 14% tax-exempt bond that's as safe as anything you can own. Prerefunded bonds of Platte River's Series F and G, in fact, are now trading in the 138 area, compared with 121 before prerefunding. And holders have already received the first year's non-taxable yield of more than 14%.

Texas Municipal Power Agency also has used the technique. The authority arranged a prerefunding in March, issuing $368 million worth of bonds yielding up to 9.55% to pay off issues sold originally in February 1982 with coupons up to 14⅝%. The first call date is 1997, and the escrow account, just as in the Platte River G Series, is made up of U.S. Treasury securities. The bonds now sell for about 144 (higher than prerefunded Platte Rivers because the call is five years further away).

So how do you identify likely candidates for prerefunding? You will have to be nimble because the dealers are alert for deals like this. They don't have the capital to buy up all potential candidates. But they have the big advantage of early knowledge. When a local authority decides to go the prerefunded route, the deal requires lawyers and investment advisers. It must be announced and advertised to the trade. Word gets around.

Nevertheless, it is possible to take a stab at identifying candidates. Start with high-coupon utility and hospital issues. Narrowing it down from there is very much like trying to identify likely takeover candidates in the stock market. When you play that game, you look at market price versus book, earnings trends and shareholder population. Playing the prerefunding game, you look at things like interest rate trends, coupon, creditworthiness and willingness of the issuer to prerefund. In either game, most of your bets may not pay off. But if you are careful in your selections—and lucky—those that do could pay the freight.

Alan Richman and Robert Adler, municipal bond analysts at Shearson/American Express, have developed a list of 15 electric utility issues that seem likely candidates for prerefunding. One of the likeliest: Northern California Power Agency term bonds of 2010 carrying a 12⅜% coupon. These were issued with MBIA insurance against default, so they have traded like an S&P's AAA-rated bond, recently around 125. Still, they would have some upward price leverage if prerefunded. Richman also likes North Carolina Municipal Power Agency Number 1 bonds carrying 14⅜% and 14¾% coupons, now trading at about 130.

Richman and Adler's colleague Daniel Berger has also worked up a hospital-issue list. Among his candidates are the 14¾s of 2010 issued by Philadelphia Hospitals Authority for its Albert Einstein Medical Center. They sell at around 129. The 14¼s of 2008 of the Hamilton County, Ohio, Jewish Hospital Association of Cincinnati, recently at 127, are also candidates.

Remember that laws of investment have not been repealed. There are no sure bets. So you may be overpaying if the bonds you select aren't prerefunded. If they are, you have hit the jackpot. Prerefunded. It's a lovely word. ■

Ben Weberman is economics editor of FORBES *magazine*

Can the U.S. really bail out the whole world through the IMF? Or will the attempt wreck our own creditworthiness?

SOMETHING NEW UNDER THE SUN

By Ashby Bladen

According to Ecclesiastes, one of your more reliable gurus, there is nothing new under the sun. Well, the Administration is about to try to prove him wrong. Just a few months ago the Administration knew nothing and cared less about the developing international financial crisis, and it was opposed to the idea of increasing the American subscription to the International Monetary Fund. But now that it has discovered the crisis, it is seriously proposing to help the banks fend off worldwide deflation and hard times by making new bailout loans to every country whose necessitous selling of exports will otherwise cause deflation. Does it concern the Administration that quite a few of those countries cannot possibly repay what they already owe? Apparently not. Throwing good money after bad on a global scale has never been tried before, and it is hard to believe that the Administration has any idea about the ultimate consequences of its new policy.

This is an excellent illustration of my basic point that, current appearances to the contrary notwithstanding, there is no such thing as a peaceful and painless disinflation. And yet this seems to be what the IMF expansion is supposed to bring about. If the outcome were left to the tender mercies of the marketplace, it would be violently and painfully self-correcting. The recent collapse of OPEC is an excellent example of how that works.

During the 1970s several oil-producing countries with large populations and low standards of living borrowed heavily to finance economic development. By now Nigeria, Mexico and even Venezuela are heavily overindebted and will have to sell their oil for whatever it will bring to avoid defaulting on their debts. Thus, conditions in oil have turned not merely disinflationary, but downright deflationary.

If it were not for political intervention, inflation would always be self-correcting. Why? Because the perception that debts are becoming top-heavy by comparison with the incomes from which they are supposed to be repaid would cause lenders to pull in their horns and cease to finance marginal borrowers. Most overextended borrowers would save, and sell whatever they could to pay down their debts. Those who could not manage would default and be foreclosed, and the pressure of necessitous selling would cause a period of deflation and hard times that would be painful but over fairly quickly. Then the world would not be saddled with chronic inflation.

Bailouts of any sort, whether by the IMF or by domestic agencies, tend to frustrate this natural self-correction. If the government of a sovereign country decides that domestic deflation is politically unacceptable, it can borrow and bail out its own residents because, unlike most people and businesses, its creditworthiness does not depend on the coverage of its debt service but upon its monopoly of legal force that allows it to command the incomes and assets of all the people in the country. It can create all the credit it wishes and bail out the overextended borrowers.

Domestic bailouts remove the risks associated with borrowing and spending excessively so that the inflation tends to worsen. In the countries that have slipped over the brink into hyperinflation, the government has been financing everybody for years.

Another trouble with bailouts, either of people or of countries, is that they weaken the incentives to produce the real goods and services on which our standard of living depends. Why work hard to produce exports for foreigners to enjoy when those nice folks at the New York banks will lend you the dollars to pay for the imports that you enjoy? These eager bankers don't seem to care very much when, or even if, you repay. Just don't default and make them write off the loan.

If the policy of bailing everybody out succeeds, it will mean global inflation on an unprecedented scale. However, it seems clear that the Administration is too busy coping with today's crises to think through the consequences of its policy. But how long will the external credit of the U.S. remain good if we use it wholesale to bail out countries that have no real chance of repaying us?

Ironically, politics may thwart this dangerous bailout. In 1932 the Reconstruction Finance Corp. was making loans to troubled banks, one of which was controlled by the family of President Hoover's budget director, Charles Dawes. The Tip O'Neill of the day, John Nance Garner, decided that publicizing that fact would enable the Democrats to score a political point by embarrassing the Republicans. So he got the Congress to require the RFC to publish the names of the banks to which it made loans. The banks figured that would be taken as an official government list of bad banks. They stopped borrowing from the RFC and closed down instead. That was the last straw that led to the Bank Holiday of Mar. 4, 1933. Once again, the Democrats will almost certainly oppose a policy that can be construed as a bailout of the bankers. ■

Ashby Bladen is senior vice president for investments of the Phoenix Mutual Life Insurance Co. and author of How to Cope with the Developing Financial Crisis.

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There is never enough newly mined silver to meet industrial demand. So why don't silver prices reflect this condition?

CAN SILVER SHINE AGAIN?

By Stanley W. Angrist

The recent wholesale bloodletting in the gold and silver markets probably cured more speculators of trying to trade those metals than anything since the Hunt debacle.

Silver as an investment did not become popular until the late 1960s, when government-imposed price ceilings were lifted. The sudden interest in silver then is generally attributed to the so-called primary production deficit—that is, the inability of mines to produce enough silver to meet industrial demand. *Indeed, primary silver production has failed to fully satisfy industrial requirements every year since 1958.* That one statement has probably suckered more neophyte speculators into long positions in the silver market than any other single sentence in the English language.

However, sales from a wide variety of above-ground sources have always acted to make up this supply shortfall. Today, any shortfall in supply is made up primarily by metal from scrap, silver from India—where it has always acted as a method of storing family wealth—and melted coins.

Silver prices hit a bottom in June 1982, when the spot price touched $4.78 per ounce. The metal has moved up sharply since then, based on two main factors. First, since most silver is now used industrially, as the economy strengthens, so will the demand for silver. Second, lower interest rates make silver cheaper to own.

The bears have a case, too. Handy & Harman, the well-known precious metals dealer, estimates that worldwide some 1.37 billion ounces of silver exist above ground. The second plank in the bears' argument comes from the fact that the General Services Administration in 1981 started to liquidate 139 million ounces of silver from the U.S. Strategic Stockpile. A number of congressmen from silver-producing states fought to get the sales stopped, which they were in December 1981. However, there is no doubt that the Administration would like to start up sales again to help reduce the budget deficit.

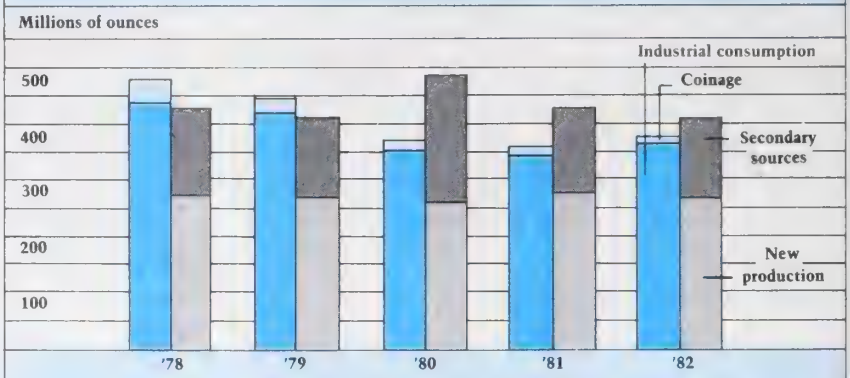
Given the strength that I think the recovery will show this year, I would be willing to side with the bulls, but I *would not* take an outright long position. I would try to take advantage of higher silver prices by way of a bull spread.

Keep in mind that such a spread in precious metals is just the opposite of such a position in the agricultural commodities. That is, when you are bullish on silver or gold, you buy the distant and sell the nearby month. In these commodities there is almost never any physical shortage. Therefore, price fluctuations in precious metals do not reflect near-term tightness or surplus, but rather the market's changing perception of their value. In a strong precious metals market, the distant month will rise more than the nearby because, as the price of the commodity rises, its carrying cost will rise. Rising interest rates can have the same effect.

The trade I am recommending is buying July 1984/selling July 1983 silver, with the more distant month at not more than a $1.05 premium. I would look for the spread to widen at least 30 cents ($1,500 per spread, using 5,000-ounce contracts), risking no more than 12 cents ($600 per spread) on a close-only basis. The margin on this spread is about $1,000, and the round-turn commission is about $100. Remember that this spread can also be done using 1,000-ounce contracts. ■

Silver—always slippery

For the last three years, the supply of silver has exceeded demand, primarily because of the worldwide recession. Private stocks (some would say hoards) of silver have increased by a total of 226 million ounces during that time. Rising prices will ultimately call it out of hiding. Note that new production is nowhere near industrial demand.



Source: Handy & Harman

Stanley W. Angrist is a commodity speculator, consultant and longtime observer of the commodity markets.

CORPORATE REPORT Updates

SPECIAL FORBES ADVERTISING SERVICE FOR INVESTORS AND THE FINANCIAL COMMUNITY

N New York Stock Exchange **A** American Stock Exchange **O** Over-the-Counter **P** Pacific Stock Exchange

EFTAIN DEVELOPMENT CO. LTD A

DMONTON, Canada, Feb. 14, 1983—Chieftain Develop-
it Co. Ltd. reported today that net income increased 46.5
ent to $18.2 million and cash flow increased 33.3
ent to $40 million during 1982 compared with 1981.
ross revenues increased 18.4 percent to $82,866,000
pared with $69,993,000 for 1981.
unds provided from operations amounted to
,041,000 ($2.76 per share) compared with $30,037,000
21 per share) in 1981.
let income for the year, including an extraordinary gain
3.3 million, amounted to $18,225,000 ($1.12 per share)
pared with $12,437,000 (80 cents per share) in 1981.
earnings in 1982 without the extraordinary gain were
,941,000 (88 cents per share), there were no extraordi-
gains in 1981.
Vorking capital amounted to $35,365,000 at Dec. 31,
2. In January, 1983, working capital was substantially
eased by the net proceeds of a $45 million issue of 8
ent convertible second preferred shares. The resulting
rd level of working capital puts the company in an
llent position to take advantage of opportunities in
3.
Contact: Tom Campbell, Manager-Corporate Communi-
ons, Chieftain Development Co., Ltd., 1201 Toronto
nion Tower, Edmonton Center, Edmonton, Alberta,
ada T5J 2Z1. Phone (403) 425-1950.)

SPITAL CORPORATION OF AMERICA N

IASHVILLE, TENN., Feb. 18, 1983—Hospital Corporation
merica today announced increased revenues and earn-
for fiscal 1982 and a 21% cash dividend increase.
hairman Donald S. MacNaughton and Thomas F. Frist,
President and Chief Executive Officer, reported that
's 1982 results were the strongest in the Company's 15-
history.
HCA's U.S. owned medical and psychiatric hospitals
the principal factors in the strong gains in revenues
earnings," said Frist. "These hospitals, including newly
structed and acquired facilities, provided 26% more
of inpatient care in 1982 than in the previous year. The
lts also reflect HCA's sustained efforts to improve
luctivity and contain costs," he added.
evenues for the year ended December 31, 1982, totaled
39,385,000, up 47% from $2,406,472,000 in 1981. Net
me increased 55% to $171,935,000, compared with
1,131,000 a year ago. Earnings per share increased
to $2.25, compared with $1.67 in fiscal 1981. All per
re results have been adjusted to reflect HCA's 4-for-3
k split distributed in January 1983.
or the fourth quarter, revenues totaled $905,792,000,
20% from $755,668,000 in the same periods of 1981.
income increased 47% to $41,785,000, compared with
,377,000 last year. Earnings per share increased 37% to
, compared with $.38 in the fourth quarter of 1981.
ICA's year-end financial position was extremely sound.
ets exceeded $3,600,000,000 at December 31, 1982,
pared to $2,958,156,000 a year ago, an increase of
6. Shareholders' equity increased 63% during the year,
$767,600,000 at year-end 1981 to $1,254,711,000 on
ember 31, 1982.
n December 1982, the Company completed the conver-
of $125,000,000 of 8¾% convertible subordinated
entures into 3,036,000 shares of HCA common stock.
Effective January 3, 1983, HCA sold 18 hospitals to a private hospital company for approximately $200,000,000. Cash proceeds of approximately $120,000,000 are being used to repay outstanding debt, bringing HCA's debt-to-capital percentage to approximately 52%. This is a substantial improvement from year-end 1981, when debt represented 65% of total capital.

The HCA Board of Directors has also declared a new annual cash dividend rate of $.40 per common share, a 21% increase from the prior $.33 per share annual payment rate. A quarterly dividend of $.10 will be paid May 2, 1983, to all shareholders of record on April 1, 1983.

"The dividend increase reflects both HCA's growth and confidence in the future," said Frist. "The Company declared its first dividend in 1972 and has increased the rate 13 times since that initial payment. The last increase prior to today's announcement was in February 1982."

HCA is a publicly owned international health care company committed to the delivery of quality patient care at a reasonable cost. HCA and its affiliates now own or manage hospitals and other medical facilities in more than 350 communities worldwide.

FINANCIAL HIGHLIGHTS

	Three Months Ended December 31		
	1982	**1981**	**Increase**
Operating Revenues	**$905,792,000**	$755,668,000	20%
Income Before Income Taxes	**69,085,000**	46,177,000	50%
Provision for Income Taxes	**27,300,000**	17,800,000	53%
Net Income	**41,785,000**	28,377,000	47%
Net Income per Common and Common Equivalent Share	**$.52**	$.38	37%

	Twelve Months Ended December 31		
	1982	**1981**	**Increase**
Operating Revenues	**$3,539,385,000**	$2,406,472,000	47%
Income Before Income Taxes	**280,435,000**	184,231,000	52%
Provision for Income Taxes	**108,500,000**	73,100,000	48%
Net Income	**171,935,000**	111,131,000	55%
Average Number of Common and Common Equivalent Shares	**82,131,000**	66,507,000	23%
Net Income per Common and Common Equivalent Share	**$2.25**	$1.67	35%

(Contact: Victor L. Campbell, Vice President Corporate Communications, Hospital Corporation of America, One Park Plaza, Nashville, Tenn. 37203. Phone: (615) 327-9551.)

NMS PHARMACEUTICALS, INC O

NEWPORT BEACH, CA.—NMS (formerly Nuclear Medical Systems, Inc.) has recently announced a revolutionary "breakthrough" in the production of a histamine antibody. The use of a highly specific histamine antibody enables scientists for the first time to obtain an accurate measurement of allergic reactions in man. Generally histamine is the by-product of allergic responses, and heretofore was difficult of measurement.

Approximately 65 million people in U.S. suffer from some form of allergy. Current (in vitro) methods of allergy testing are lengthy and tedious and (in vivo) methods are uncomfortable and sometimes hazardous to the patient. Most are expensive and inaccurate. NMS has initiated the first development of an allergy test that is direct, quantitative, accurate, rapid and without risk to the patient.

Patients presently may experience allergic or allergic-like responses to medication, which occasionally can be life threatening. Currently, no convenient, safe or rapid test is available to predict such a response. NMS has, under development, kits useful in determining sensitivity to medication, utilizing histamine antibody.

Under the direction of pathologist I. Haydik, M.D., NMS has established the procedure for the diagnosis of allergies.

NMS anticipates eventual sale of allergy kits incorporating histamine antibody.

The implications of this development is dramatic to the $3 billion market in allergy testing and therapy.

NMS (OTC) symbol NMSI manufacturers medical imunodiagnostic test kits, operates a full service clinical laboratory and conducts research in diagnostic immunology pertaining to cancer, allergy and heart attack.

(Contact: J. Irani, President, NMS Pharmaceuticals, Inc. 1533 Monrovia Ave, Newport Beach, CA. 92663. Phone: (714) 645-2111.)

UNITED ENERGY RESOURCES, INC. N

HOUSTON, TX., Feb. 24—The Board of Directors of United Energy Resources, Inc. today increased the quarterly dividend on the company's common stock 6.9 percent to 62 cents per share from 58 cents per share, with the new dividend payable on April 1, 1983, to stockholders of record on March 7, 1983.

The company also reported unaudited 1982 consolidated net income of $118.2 million, or $4.25 per share, compared with $215.7 million, or $7.75 per share, in 1981. Reflected in 1982 results are an extraordinary charge against income ($112 million pre-tax) and a non-operating reserve ($25.4 million pre-tax) incurred by United Gas Pipe Line Company, the corporation's largest subsidiary. Income before the impact of the non-operating reserve and the extraordinary item for the fourth quarter of 1982 was $33.3 million, compared with net income of $56.8 million for the comparable period in 1981.

(Millions, except per share amounts)

	Three Months		Twelve Months	
Periods Ended Dec. 31	**1982**	1981	**1982**	1981
Operating revenues	**$1,316.1**	$1,505.3	**$5,561.8**	$5,431.0
Income before impact of Alaskan investment reserve and extraordinary item	**$ 33.3**	$ 56.8	**$ 192.4**	$ 215.7
After-tax impact of Alaskan investment reserve	**13.7**		**13.7**	. .
Income before extraordinary item	**19.6**	56.8	**178.7**	215.7
Extraordinary item—cost of litigation settlement, net of income tax benefits	**60.5**	. . .	**60.5**	. . .
Net income	**$(40.9)**	$56.8	**$118.2**	$215.7
Earnings per share	**$(1.47)**	$2.04	**$4.25**	$7.75
Weighted average shares outstanding (thousands)	**27,820**	27,820	**27,820**	27,818

(Contact: Marvin L. Brown, Jr., Manager-Media Relations, United Energy Resources, Inc., P.O. Box 1478, Houston, TX 77001. Phone: (713) 229-5373.)

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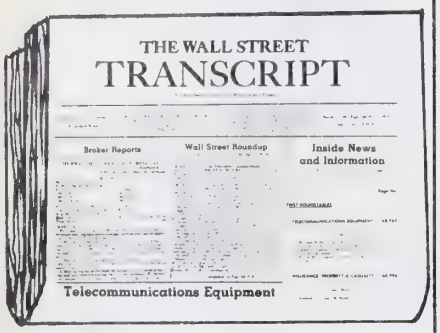

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The gold market may look as if it's doing what it usually does, but the people playing the game now are different.

THE NEW 49ERS

By Srully Blotnick

Over the years I have found that preferences in ice cream flavors tend to persist over a person's lifetime. Once a chocolate nut, always a chocolate nut. Not so with investment preferences. You can be a bond-oriented investor at one stage, a commodities-oriented investor at another and a goldbug at yet another. What with February's sharp drop in the price of gold, it is worth noting that gold speculators now are a significantly different breed than they were four years ago. This has implications for the future price of the yellow metal.

For example, there is the allegedly conservative, 64-year-old, utilities-loving investor who four years ago told me he wanted safety above all. Now he is playing the gold stocks. Has he entered his second childhood? Hardly. The 26-year-olds in the sample, some of whom haven't outgrown their first childhood yet, reveal similar switches. It's the nature of investment markets. People like vanilla in one cycle, strawberry parfait in another.

What has this to do with the price of gold? Plenty. The precious metals market now has a considerable number of actively participating players who were never there before. They are unlike the first wave of speculators who poured into it in steadily increasing numbers in the late 1970s. Current participants in gold tend to be older, wealthier (to a highly significant degree) and somewhat better educated. The small speculators who were there first—let's call them pioneers, or better, 49ers—are still there, but fewer. For the early 49ers precious metals have lost some of their excitement.

Interestingly, the older, wealthier people coming to this market now aren't seeking a huge and instant speculative windfall, though none would protest if that happened. Instead, they have come for protection against inflation. This at the very time so many of the experts are telling us that inflation has been licked. Previously, these conservative, wealthy, older investors shunned gold as a vaguely un-American and perhaps even anti-American investment. They wanted an inflation hedge but had many reservations about this one. Now that stigma has been removed, and gold has gained some respectability as insurance against inflation.

On the whole, the new (but older) 49ers are sick and tired of hearing about the end of inflation. The flood of books and articles on the subject, which they were glad to see initially, now annoy more than inform them. "Sure it's dead for the moment," said the 64-year-old mentioned above, "but anyone who tells you it's dead *for good* is a fool."

I have identified two groups of 49ers: the old-time goldbugs, shrinking in number, and a new group that likes gold as a hedge against the danger of renewed inflation. There is a third group: the camp followers. This bunch always goes wherever the action is. Last year the gold stocks in particular,

Dr. Srully Blotnick is a research psychologist and author of Getting Rich Your Own Way *and* Winning: The Psychology of Successful Investing.

and the metals and mining shares in general, were staging a strong rebound, and they jumped aboard. Their investment philosophy can best be summed up by, "If it's moving up, throw money at it." These people are always with us, and their investment behavior has a suicidal element in it. When the market begins to turn against them, they tend to freeze, to drop into passivity—and that's just what they did when gold started to slide. Why do they behave this way? The answer is fascinating.

We all tend to sell too quickly when stocks are rising and hold on too long when they are falling. But the effect is exaggerated if it was the upward action of the stock itself, not a knowledge of the underlying fundamentals, that got us interested in it in the first place.

Why? Anyone who examines a company closely soon sees all the potential problems and personality conflicts that arise on a regular basis. A closeup look reveals the company for what it is, warts and all. One can wax ecstatic anyway, but the complex reality one has seen serves as something of a brake to extreme flights of fancy.

Not so where a chart heading skyward is concerned. It creates a smooth, clean—and most important—simple picture of instant wealth. When anything goes wrong (with the stock, that is, not the company), there is no alternative picture to fall back on. The action-seeking investor freezes. He doesn't know what to do.

The implications for the gold market are interesting: Shrugging off their passivity and swallowing their losses, the action-hunters are slowly departing. Who are they selling to? To the inflation-hedgers. Gold's abrupt price decline gives the latter what they see as a chance to buy insurance more affordably.

Gold is moving from weaker into stronger hands. That has positive implications for the price of gold, at least until people conclude that inflation is dead once and for all. Since inflation has been with us for decades, that conclusion isn't likely to become generally accepted in the immediate future. In short, gold is becoming more respectable—and more volatile—as it makes the lumpy transition from a speculative metal to a form of insurance. ■

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Is any stock worth 80 times earnings? Diasonics could be one of the rare ones.

HIGH-TECH FEVER

By Thomas P. Murphy

For speculators in high-tech new issues, Diasonics was the perfect play. It was in the right place—the medical industry. It had an incredible growth record, and it came with impeccable Silicon Valley credentials. A one-decision stock: Buy every share you can get.

For more thoughtful students of the stock market, however, Diasonics became something quite different—the infuriating symbol of an overpriced new issue sold into a market already taking leave of its senses. Imagine putting a nearly $1 billion valuation on a company that nobody on Wall Street had even heard of the month before! Those venture capitalists finally had gone too far.

Who was right? So far, you would have to say the venture capitalists. Diasonics did go to a premium, from an original issue price of 22 to a high of 29½. Now, a month later, it is back about where it was issued, trading around 22.

But the skeptics were right to worry. The high-tech and original-issues markets have become frothy. Hambrecht & Quist's index of high-technology stocks soared from 380 last August to 791 by February. It has backed off, to the mid-760s recently. As for original public offerings, the volume boggles the mind. Over $1 billion will be raised in the first quarter of 1983, compared with last year's first quarter of only $186 million—a 500% gain from a level that was already pretty healthy.

But getting back to Diasonics. That the market shows signs of bubbling over doesn't necessarily prove that Diasonics was and is overpriced. It is, in fact, a company that seems to be both good and lucky.

In case you wouldn't know a Diasonic if it sat on your lap, the company is in medical imaging—what we used to think of as the X-ray field. But a number of other technologies are used as well.

Part of Diasonics' success stems from one of these new technologies. It leads in ultrasound imaging—using high-frequency sound waves instead of X-rays to penetrate the human body and create either a photographic image of what the sound waves meet or, in the case of cardiovascular examinations, actually watch the heart pulsing.

Diasonics' sales in the ultrasound market attest to how fast a company with better technology can move in the medical field. They went from $4.9 million in 1979 to $102 million in 1982. Diasonics' other market is in an even newer technology called Digital X-ray. Diasonics had $2 million sales in that market in 1981 and $35 million last year.

That is the kind of growth that struck Wall Street's fancy. But the real frosting on Diasonics' cake is a still newer technology—nuclear magnetic resonance. NMR is a dramatically new approach to imaging; it uses no X-rays and may turn out images that are superior to anything from the other technologies.

With NMR, a patient is placed in a chamber that is surrounded by a powerful but harmless magnetic field. Hydrogen molecules in the body align themselves with the magnetic field and then a burst of radio energy is applied, causing the molecules to "spin." It is this spinning effect that is recorded, creating pictures we have never seen before of the interior of the human body. One example: The brain abnormalities caused by multiple sclerosis may never have been seen before in a living human. An experimental NMR machine built by Diasonics shows them clearly.

NMR, unfortunately, is going to be as expensive as it is good. Each machine may sell for as much as $2 million, and Diasonics is one of only two small companies in the field. The rest of the competition, when it comes, will be from the traditional players in the X-ray business: General Electric, Johnson & Johnson's Technicare division, etc. With FDA approval expected this summer, Diasonics seems to have edged ahead in NMR, and that edge could be very important in what is certain to become a multibillion dollar world market.

How has a small and almost unknown company managed to move so fast in so many different directions? Diasonics is not your typical Silicon Valley story. It has grown as much through adroit acquisition as through internally generated growth. Part of the new NMR technology, for example, stems from a purchase from Pfizer. The European sales and service subsidiary comes from another acquisition and part of the company's U.S. distribution system from still another.

Diasonics, from its start five years ago, was a company in a hurry, and it has not tripped over its ego in getting where it wants to go. If somebody else's technology is better, Diasonics unabashedly buys. If a sales force is needed in Europe, Diasonics doesn't sweat out building one. It buys a distributor.

Purists may find this inelegant, but I think Diasonics, at 80 times last year's earnings, may turn out to be a better buy than the average high-tech stock at one-third that multiple—which, by the way, doesn't make either a bargain.

For my money, the caution light is blinking. It is no time to chase high-tech stocks and new issues into the stratosphere. Look for quality and buy on weakness. ■

Thomas P. Murphy heads a venture capital firm, Partnership Dankist, Stamford, Conn.

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o make your portfolio perform well, it's nportant to be able to identify the most mely stock selections and to be able to eed out any "misfits." You should also be nmediately aware of significant *changes* in ny of your stocks. That's why The Value ine Investment Survey every week of the ear ranks 1700 stocks—each *relative* to all e others—for *Probable Market Performnce in the next 12 Months,* as follows (the alue Line rank is determined mainly by one ock's earnings yield and growth features lative to all 1700 stocks):

100 stocks are ranked 1 (Highest)
300 stocks are ranked 2 (Above Average)
900 stocks are ranked 3 (Average)
300 stocks are ranked 4 (Below Average)
100 stocks are ranked 5 (Lowest)

ote: Not every stock will always perform in ccordance with its rank. But it is a fact that vorably ranked stocks, as a group, have utperformed poorly ranked stocks with markable consistency since the ranking stem was introduced in 1965.

hile past performance can never arantee future success, this record of ore than 17 years of successful disimination strongly suggests that you can the investment probabilities in your favor using the Value Line ranks.

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e ranks are designed to measure probilities. We expect lower-ranked stocks to up less in a rising market—or down more a market drop—than higher-ranked ocks. And conversely . . .

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e 100 stocks *currently* ranked 1 (Highest) Probable Market Performance in the xt 12 Months (Value Line Feb. 4) include me less well known names—the sort of ocks not closely followed by most sources investment information. Just a few of em are AYDIN CORP., MANOR CARE, LTE HOME, SIMMONDS PRECISION, d V.F. CORP. (This may show why you ouldn't confuse the timeliness of a comtment in a *stock* with the size or fame of a mpany.)

ant to weed out your portfolio?

e suggest you avoid the 400 stocks rrently ranked 4 or 5 by Value Line for xt-12-Months Performance. If you're arish, however, these stocks may be good ort sales or candidates for option writing.

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ery week—for EACH of 1700 stocks—The lue Line Investment Survey in its Summry and Index presents the up-to-date . . .

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There are lots of components to any real estate transaction. And price is not necessarily the most important.

WHEN LESS IS MORE

By Stephen E. Roulac

There's an old adage in real estate that was never more pertinent than it is today: *Terms are as important as price*. Grasp this concept firmly before you buy or sell. What it means is that the highest price isn't necessarily the best price. Less can be more. And vice versa. Experienced real estate people apply this analysis every day. Neophytes often do not understand it.

A look at how one deal was structured last year will show you what I mean: A seller with a prime downtown condominium was asking $292,500. As an added inducement, his unit had an assumable mortgage for $124,000 at 11%. His buyer offered only $250,000—$126,000 in cash and assumption of the mortgage, with closing and transfer of occupancy at the seller's discretion.

That appeared to be $42,500 less than what the seller saw as a "slightly-below-the-market" asking price. With both parties adamant, it looked like no deal. The seller thought the problem through after learning a key piece of information. The buyer was a wealthy businessman who hoped in a few years to move to the city from his suburban home. His family was less than enthralled by the idea, so he thought that buying his city residence ahead of schedule might allow an easier transition. In fact, he planned to rent the property before moving in.

Then outlines of a possible deal began to emerge. The seller liked his condominium but needed equity from the property to reduce prime-plus loans taken out to finance his expanding business. For a place to live, he was planning to rent for a brief period and buy a new residence within two years to avoid capital gains taxes. Additionally, he could use the cash in his business.

Most important, time was money for the seller. He thought he could get his asking price if he waited. But he was carrying a $100,000 personal loan, with the bank's taking a second-mortgage lien at 3 points over the then 21% prime—or 2% per month carrying cost. The seller's monthly costs associated with the housing were:

First-mortgage debt service	$1,150
Interest on bank loan	2,000
Association fees	300
Property tax and insurance	250
Total monthly cost	$3,700

The seller reflected that he still needed a place to live; but he didn't want to sacrifice the $42,500 shortfall between the offering price and the asking price. By concentrating on terms rather than on price, the seller found a solution.

His prospective buyer had no immediate need to occupy the condominium, and there would be costs, aggravation and risk of damage in renting the unit. Maximizing rental income would be of little concern, since the buyer was in a 50% tax bracket. Who would be a better tenant than the former owner?

The seller accepted the buyer's offer, with this modification. In return for an immediate close, he wanted the right to rent the property for 20 months at $400 per month. After a little thought, the seller accepted. Sure, he had figured on renting the apartment for $1,200 rather than $400. But the bottom-line difference was only $5,000 over the two years, allowing for tax savings, leasing costs and a vacancy factor. Then, too, he avoided completely the aggravation of finding a suitable short-term tenant.

What about the seller? He accepted an offer $42,500 below his asking price, but in the end he received the equivalent of $6,000 *more* than his asking price. Here's how the numbers add up:

1) By staying in his residence, the seller saved moving costs of $2,000.

2) The discounted rent—20 months at $800 savings per month—was worth $16,000.

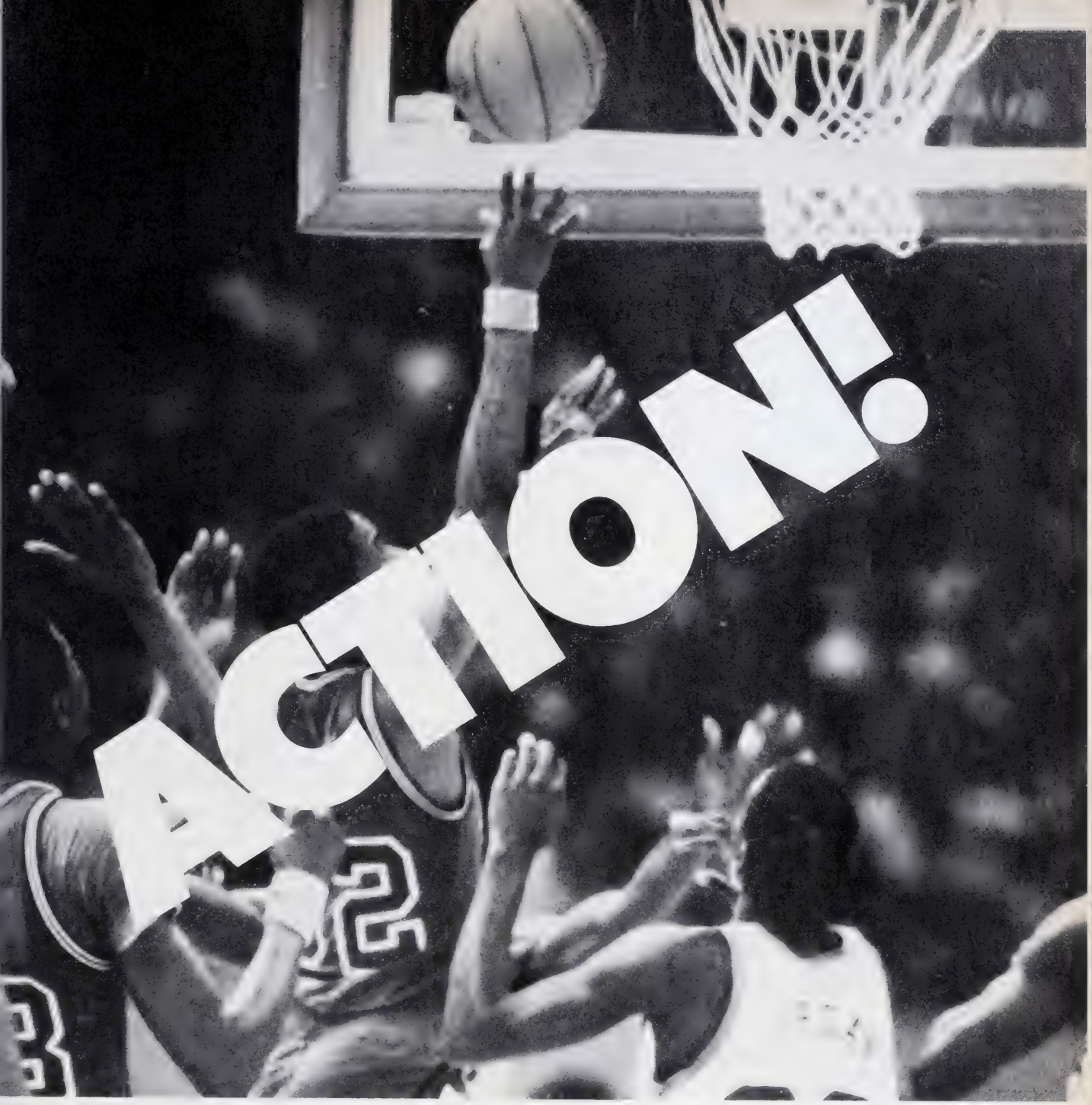
3) The immediate deal eliminated perhaps five months of housing-related carrying costs. After all, the seller thought it would take that long to find and close with another buyer. Total savings: $14,500—based on net monthly costs of $2,900 ($3,700 less $800 rent discount).

4) Finally, the all-cash terms saved the seller a $13,500 "creative financing" discount that he was resigned to incurring. For another buyer he was resigned to taking back $75,000 of "paper" for three years at an interest rate 6% below the market.

Although knowledgeable about present value implications in measuring the worth of the deal, the seller concluded any timing delay in the realization of the benefits of the deal were offset by the assurance of a known transaction and the avoidance of the uncertainty that accompanies any "to be done" proposition.

In short, by accepting less than his asking price, the seller ended up with more than his asking price. This involves neither creative financing nor financial legerdemain. It is simply good deal making. Instead of being rigid about price, the seller thought creatively and structured a transaction that made sense for both parties. Not surprisingly, both came out ahead. ■

Stephen E. Roulac is chairman of National Management Advisory Services, a division of Kenneth Leventhal & Co., a national CPA firm specializing in real estate and financial services.



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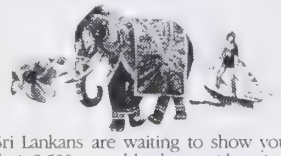

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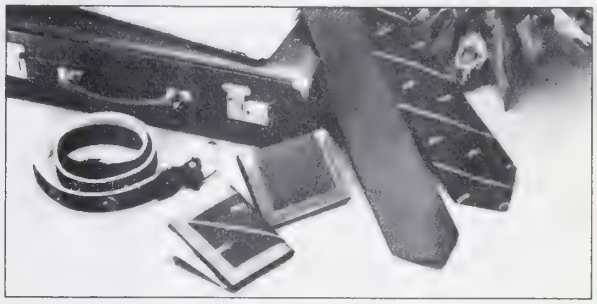

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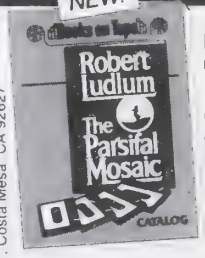

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Index of companies covered in news stories and by the columnists in this issue.

Airship Inds (U.K.) 182
Alfa (Italy) 12
Altos Computer 198
Amalgamated Bank of New York 178
American Brands 70
American Broadcasting 26
American Motors 54
Apple Computer 44
ARA Services 147
Avatar Holdings 20
Baird, Patrick & Co 50
Baldwin-United 41
Bank of New York 42
Bankers Trust New York 42
BBDO Intl 26
Bechtel 149
Bethlehem Steel 40
BL (U.K.) 12
BMW (W. Germany) 12
Boeing 12
Burroughs 198
Cable & Howse 200
Capital Cities Communications 16
CBS 8, 26
Century 21 147
Charles Schwab & Co 178
Chemical New York 42
Chrysler 12, 54
Citicorp 50, 140
Coca-Cola 184
Consolidated Cigar 180
Continental Illinois 42
Convergent Technologies 198
Crocker National 42
Daimler-Benz (W. Germany) 12
DEC 200
Diasonics 212
Digital Equipment 44
Dow Corning Wright 8
Doyle Dane Bernbach Intl 26
Equity Research Assocs 196
ERA 148
European Ferries (U.K.) 182
Fiat (Italy) 12
Fidelity 178, 196
Firestone Tire & Rubber 68
First Natl Bank of Boston 96
Fluor 149
Foote, Cone & Belding 26
Ford Motor 12, 54
Fortune Systems 198
Franklin Realty 21
Fuqua Inds 18
Gannett 170
GE 212
General Dynamics 12
General Housewares 100
Gibraltar Financial 139
GM 12, 54
Goodyear Tire & Rubber 68
Grumman 115
Hambrecht & Quist 198
Hamilton County, Ohio, Jewish Hospital Assn of Cincinnati 205
Harte-Hanks 166
Helmsley-Spear 181
Hewlett-Packard 44
Hilton Hotels 147
Home Federal Savings & Loan Assn 139
Hospital Corp of America 148
Humana 148
Hutton, E.F. 176
IBM 44, 200
IC Inds 147
Interpublic Group 26
John Blair & Co 26
Johnson & Johnson 25, 184, 202
JWT Group 26
K mart 68
Ladenburg, Thalmann & Co 196
Littelfuse 124
Lockheed 12
Lomas & Nettleton Financial 68
M/A-Com 59
Management Science America 162
Manufacturers Hanover 42
Marine Midland Banks 42
McCormack & Dodge 164
McDonald's 147
McDonnell Douglas 118
McGraw-Edison 124
Mellon Bank 42
Merrill Lynch 50, 176
Metromedia 16
Miller & Miller Auctioneers 16
Montgomery Securities 50
Morgan & Co., J.P. 50
Morrison-Knudsen 149
National Medical Enterprises 148
National Service Inds 110
National Steel 39
NCR 44, 198
North Carolina Municipal Power Agency 205
Northern California Power Agency 205
Norton Simon 50
Ogilvy & Mather Intl 2
Overseas Shipbuilding Group 5
Paine Webber 17
Pep Boys 6
Peugeot (France) 1
Philadelphia Hospitals Authority 20
Philip Morris 7
Picker Intl 20
Platte River Power Authority 20
Prudential-Bache 42, 17
Putnam Funds 19
Random House
RCA 26, 14
Renault (France) 12, 5
Reynolds R.J.
RG Dynamics 10
Rosenberg Real Estate Equity Funds 19
Rothman Group (U.K.)
Rotoplas (Israel) 15
Sanrio (Japan)
Scandinavian Tobacco 7
SCA Services 14
Sears, Roebuck 6
Sequoia Fund 20
Shearson/American Express 17
Skirvin Plaza Hotel 17
Smith Barney, Harris Upham 4
Southland Royalty 5
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Superior Oil 5
Tandy 4
Tecumseh Prods 2
Telepictures 18
Texas Instruments 4
Texas Municipal Power Authority 20
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Toll Brothers 9
Tony Lama 1
Tracor 12
Trans World 14
Triton Group Ltd 1
United Technologies 4
Universal Leaf Tobacco 7
University Computing 16
Volkswagen (W. Germany) 1
Volvo (Sweden) 1
Wang Labs 44, 20
Washington Federal Savings & Loan 6
Westergaard Fund 19
Western Savings 9
Westinghouse Elec 18
Wometco Enterprises 1
Xerox 19

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In its official publication, *Informa-on,* the Pennsylvania Railroad makes plain that George M. Pullman was ot the introducer of the sleeping car the traveling public. Pullman's first ar was put in service in 1863. Way ack in 1837 a sleeping car was used n the Cumberland Valley Railroad. It as built in Philadelphia. . . .

"The father of Col. M.C. Kennedy, ice president of the Pennsylvania ailroad, was president of the Cum-erland Valley Railroad at the time, nd to him, perhaps, should go the tle of 'Father of the Sleeping Car.' "

For many who have lived with it, the otor car industry stands as some-hing bigger and more momentous han organized engineering, produc-ion and selling of a new commodity. he commodity is not new anymore; is universally adopted. But the ense of something better than mate-ial progress in the movement re-nains as strong as ever.

"The phenomenal advance of the ndustry in this country seems to be ess the natural result of broadly dis-ributed purchasing capacity in our arge nation than the fruit of a myste-ious kinship between the automobile nd the spiritual character and habits f our population."

ifty years ago

April 15, 1933)

The end of the sixth week since its dvent to power finds the new Ad-ministration's ambitious legislative rogram well on the road toward ful-illment. From the almost bewilder-ng number of new laws, proposed aws, amendments, etc., the following rogress and results may be recorded.

"Banking. The reorganization, re-pening or liquidation of banks that emained closed when the banking

In six weeks FDR changed the U.S. forever

holiday ended is still one of the most important problems confronting the government. Total amount tied up in closed banks is between $3 billion and $4 billion. . . .

"Unemployment. The Senate passed the [Senator Hugo] Black 30-hour-a-week bill. The measure would limit employment to not more than five days a week and not more than six hours a day in 'any mine, quarry, mill, cannery, workshop, factory or manufacturing establishment,' the products of which move in interstate or foreign commerce. The bill, declared by many to be unconstitutional, has a two-year limitation. . . .

"Farm Relief. The farm relief bill is still pending in the Senate, but it is generally conceded that the measure will soon be passed as proposed by the President. Tacked on to the farm relief bill is a far-reaching plan for refinancing farm mortgages in a way to make the indebtedness conform more nearly to present commodity prices. . . .

"Prohibition. Beer of 3.2% alcoholic content became legal under federal statutes on Apr. 7. The repeal of the 18th Amendment awaits action by the states. Michigan has the honor of being the first state to vote for repeal. Wisconsin was second. In 25 states the machinery for action on repeal has been set in motion.

"Securities. To the ancient rule of *caveat emptor* the further doctrine 'Let the seller also beware' has been added in a bill proposed by President Roosevelt. It forbids the sale or advertisement of securities until information has been filed with the Federal Trade Commission. . . ."

This burst of activity after the long Depression so cheered the nation that Roosevelt got nearly half a million letters of advice within days of his inauguration. Nor did the pace slacken. Besides the imposing list above, the items already tackled or in the works included cutting traditional government spending, forming the Civilian Conservation Corps, regulating public utilities and the stock and commodity exchanges, easing the home mortgage burden, quitting the gold standard and reshaping U.S. relationships to the rest of the world economy. It was, as one New Dealer exulted, "a time of rebirth after a dark age."

Twenty-five years ago

(April 15, 1958)

"FORBES has received quite a fair number of letters commenting on the editorial 'Isolationism's Other Face' *(Fact and Comment, Mar. 15, 1958)* in which this magazine urged an extension of the Reciprocal Trade Program. Almost without exception the letters opposed our stand. . . .

"I am certain that a vast majority of Americans want to see our foreign trade flourish. . . . But the one-sidedness of our mail on this subject does underscore one point. It is that the protectionist pressure groups are vehement and well-organized while the free trade majority is not."

—Malcolm S. Forbes

"In the face of the small but juicy bite that European autos have been taking from a shrinking U.S. market, Ford Motor Co.'s Henry Ford II has one consolation: One of the prime gainers will be Ford's own offspring, Britain's Ford Motor Co. Ltd. Sir Patrick Hennessy, chairman of Dagenham, England's Ford company, was roaring through the gears on his way to what looked like a surefire, best-ever 40,000-car year for English Ford in the U.S. . . ."

This English Ford was a hot U.S. seller

Thoughts
on the Business of Life

True enjoyment comes from activity of the mind and exercise of the body; the two are united.
ALEXANDER HUMBOLDT

Only in a quiet mind is adequate perception of the world.
HANS MARGOLIUS

Worry compounds the futility of being trapped on a dead-end street. Thinking opens new avenues.
CULLEN HIGHTOWER

Each of us needs time for mental self-renewal.
WHITT N. SCHULTZ

The mind, like the body, is subject to be hurt by everything it taketh for a remedy.
GEORGE SAVILE

Some degree of abuse is inseparable from the proper use of everything.
JAMES MADISON

A Text . . .

But the path of the just is as the shining light, that shineth more and more unto the perfect day.
PROVERBS 4:18

Sent in by Gary Copeland, Eldorado, Okla. What's your favorite text? *The Forbes Scrapbook of Thoughts on the Business of Life* is presented to senders of texts used.

People who cannot find time for recreation are obliged sooner or later to find time for illness.
JOHN WANAMAKER

"The man who works 52 weeks in the year does not do his best in any one week of the year," Daniel Guggenheim, onetime head of the greatest smelting and mining family in America, impressed upon me. Real recreation quickens aspiration. The true purpose of recreation is not merely to amuse, not merely to afford pleasure, not merely to "kill time," but to increase our fitness, enhance our usefulness, spur achievement.
B.C. FORBES

The mass of men lead lives of quiet desperation.
HENRY DAVID THOREAU

Rest and motion, unrelieved and unchecked, are equally destructive.
BENJAMIN CARDOZO

All intellectual improvement arises from leisure.
SAMUEL JOHNSON

To be able to fill leisure intelligently is the last product of a civilization.
BERTRAND RUSSELL

The great felicity of life is to be without perturbations.
SENECA

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Work is the best method devised for killing time.
WILLIAM FEATHER

When people are bored, it is primarily with their own selves that they are bored.
ERIC HOFFER

The pessimist's fault is that he is not gay enough himself to realize that the only lasting fun in life comes from what we may contribute to it.
WILFRED T. GRENFELL

Optimism is a kind of heart stimulus—the digitalis of failure.
ELBERT HUBBARD

Humor purges the blood, making the body young, lively, and fit for any manner of employment.
ROBERT BURTON

It is not true that suffering ennobles the character; happiness does that sometimes, but suffering for the most part makes men petty and vindictive.
SOMERSET MAUGHAM

Self-denial is simply a method by which man arrests his progress.
OSCAR WILDE

The person who can laugh with life has developed deep roots with confidence and faith—faith in oneself, in people and in the world, as contrasted to negative ideas with distrust and discouragement.
DEMOCRITUS

The test of an enjoyment is the remembrance which it leaves behind.
LOGAN PEARSALL SMITH

FORBES
April 25, 1983

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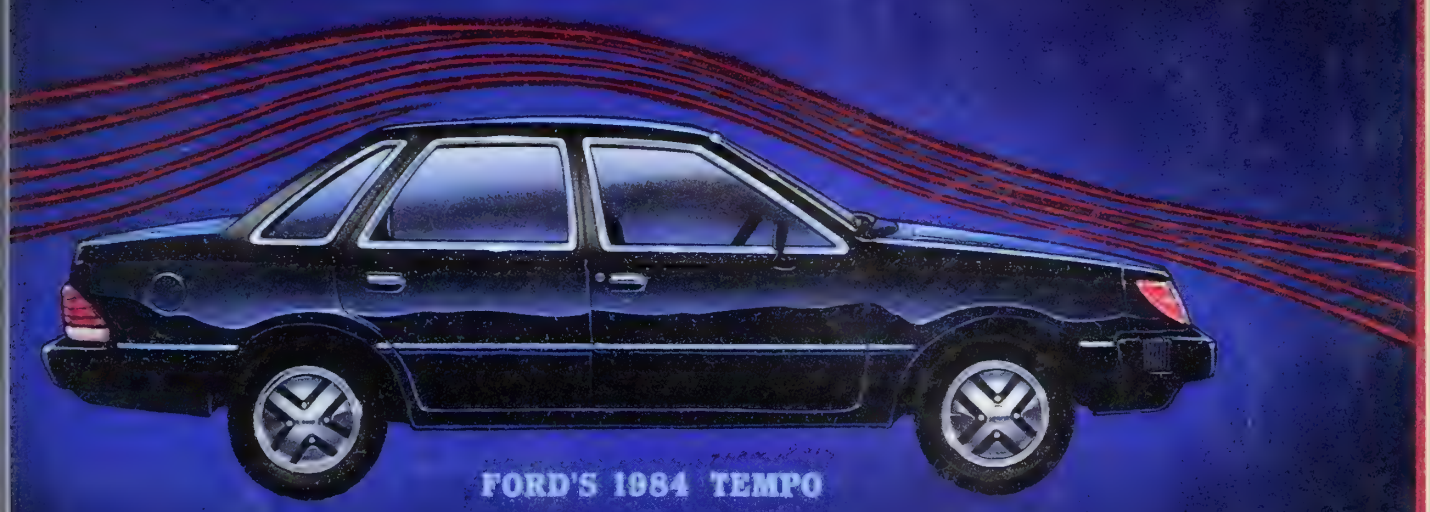
ORD MOTOR'S AKE-OR-BREAK EAR



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Thoughts on the Business of Life

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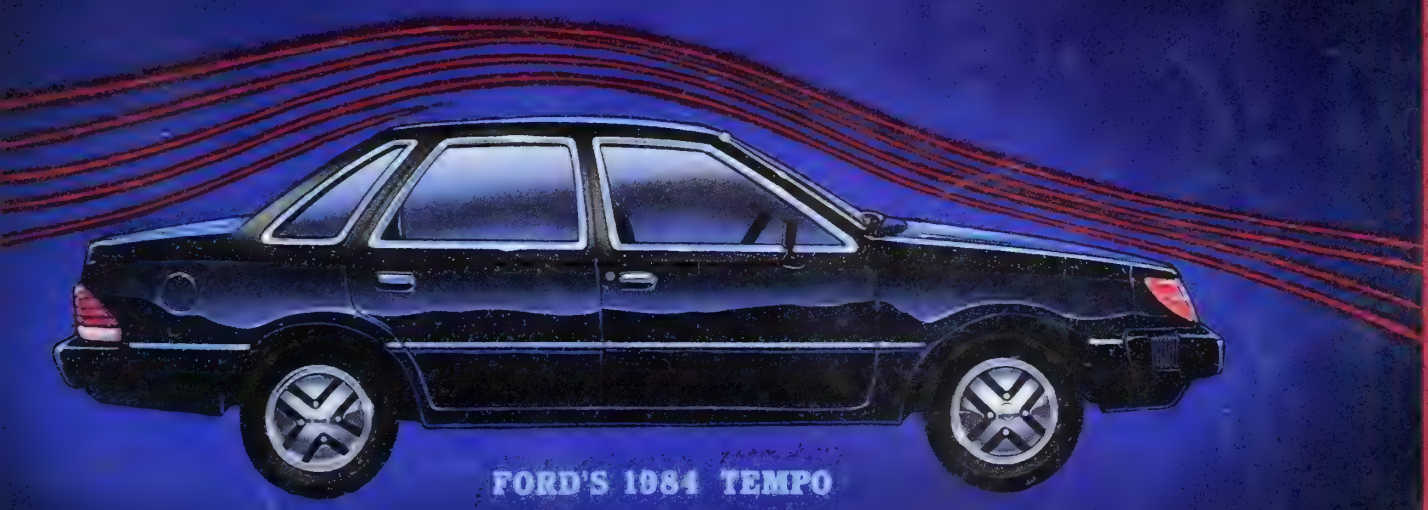

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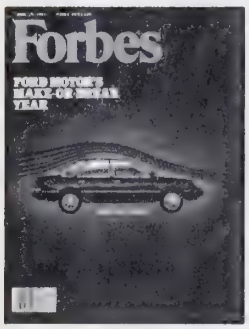


98 *Ford: Another try at the middle-market car—with a lot riding on it.*

40 *"Call them shareholder protective amendments"—maybe.*

50 *"The economic system cannot be disentangled from ethical concerns."*

38 Accountants:
In Whom Do We Trust?
Fox & Co.'s Norman Klein sounds a little defensive. Well he might.

40 Takeovers:
Spreading Shark Repellent
Read that proxy. Management may be busy protecting itself.

41 Companies:
Varian Associates
Promises, promises.

43 Investments:
Gulfstream In The Stratosphere
Here's the biggest new issue in years. It will make at least one person very happy.

44 Investments:
Cytoscan, Inc.
Never heard of it? Not to worry.

48 The Streetwalker:
Downdrafts
An intriguing solution if you're worried about the risk in airline stocks. Also: Reading Co.; Northwest Industries; Madison Fund.

50 As I See It:
Charles K. Wilber
Is the Catholic Church anticapitalist? An interview with the chairman of the economics department of Notre Dame University.

58 As I See It:
Lawrence Olson
Would you believe an impending labor shortage in the U.S.?

60 Companies:
Flowers Industries, Inc.
The magic touch of the last of the big independent bakeries.

76 Business And Government:
Citizen Bobby Inman
A premier intelligence officer enters the business world—and is dismayed at what he finds.

78 Employment:
Service City, U.S.A.
The great shift from smokestacks to services bodes well for New York City.

80 Profiles:
Mike Levy Of *Texas Monthly*
At 36, he has created a legendary magazine success. But the encores are a little harder.

83 On The Docket:
"LIFO" Layoffs
Fair's fair. Or is it? Also: Curbing class-action legal fees.

84 The Numbers Game:
Investment Tax Credits
In which real-world worries are pitted against theoretical truth, and the real world comes out ahead.

86 Taxing Matters:
Her Majesty's Tax Haven
It can't be Britain, but it is—just as long as you're not British. Also: Good news for FIRPTA's foes; abolishing a "ghoulish tax"; the IRS stuffs a silver lining with a cloud.

92 Investments:
Let 'Em Eat Stock
How come airlines are selling off pieces of their subsidiaries even though they have no breakup intention?

94 Espionage:
Who Was The Fifth Man?
A chat with the author of the spy book the British tried to ban.

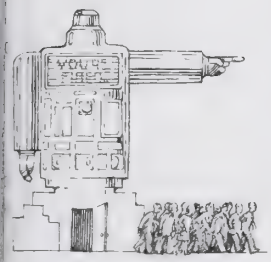
96 Companies:
Harris Corp.
Granted, it may know more about word processing than anyone else in the world. But there's many a slip between cup and lip.

98 Cover Story:
Déjà Vu At Ford
Chrysler has squeaked through brilliantly. General Motors is moving more confidently. Now all eyes are on Ford and its Achilles' heel, the middle-market car.

109 The Up & Comers:
Timberland
Work boots seem an unlikely item for the carriage trade, but it turns out they aren't. Also: Psych Systems; Newcor, Inc.; Quickprint, Inc.

131 Companies:
Toro
Is the classic concept-stock about to pull off the classic turnaround? Not quite yet.

132 Companies:
Shopwell, Inc.
Gourmet foods for the masses.



83 *"This is not a case of right or wrong, but a case of two competing rights."*

110 *The Up & Comers: It probably had to come sooner or later—the computer as psychoanalyst.*

132 *Shopwell: How to revive a lackluster big-city grocery chain? Give 'em a touch of class.*

194 *The Money Men: "You can't survive in this business if it's just money."*

134 Companies:
Mead Corp.
Jim McSwiney made the company takeover-proof, sure enough. On the other hand. . . .

147 Companies:
Rich Products
From Coffee Rich to Freeze Flo, it's all in the family.

148 Technology:
The Thoroughbred Plateau
Why do humans run faster and faster, but horses don't? Also: High-tech energy management; overreacting to the shoddy.

159 Personal Affairs:
Cataract Surgery
What used to be a feared and dangerous operation is now common, simple and relatively painless. Also: The "frequent flier" backlash; help on college costs; giving to charity.

Faces Behind The Figures

170 Donald Burr,
People Express
170 Joseph A. Lagore,
Sony
171 G. Daniel Prigmore,
Fidelity Group
171 Joseph Flom,
Skadden, Arps
174 Jim Jimirro,
Walt Disney Productions
174 Carla Lallatin,
New York City Municipal Supplies
176 Tony Hendra and Peter Cohn,
Off the Wall Street Journal II

182 Statistical Spotlight:
Twice Shy
After getting burned by optimism for a couple of years, the analysts are acting as if they're not really sure about the recovery.

194 The Money Men:
Oak Investment Partners
Technology alone can't ensure venture capital success. People can.

195 The Funds:
A Hot New Product
It's called tax-managed stock funds.

Money And Investments

33
What's Ahead For Business
34
The Forbes Index
179
The Forbes/Wilshire 5000 Review

Columnists

197
Ben Weberman
198
Srully Blotnick
200
Thomas P. Murphy
202
David W. Dreman
204
Ann C. Brown
206
Stanley W. Angrist
207
A. Gary Shilling
208
Ashby Bladen

Departments

6
Side Lines
8
Trends
14
Follow-Through
18
Readers Say
21
Fact and Comment
24
Other Comments
29
Fact and Comment II
210
Editorial Index
211
Flashbacks
212
Thoughts

Photos:
6, François Lochon/Gamma Liaison; 8, Liaison; 41, 48, 50, 76, Wm. Franklin McMahon; 42, John McDermott; 58, Penelope Breese/Liaison; 78, Hiroyuki Matsumoto/Black Star; 80, Shelly Katz; 92, Patrick Pagnano; 94, 171 bottom, 176 top, Bill Kelly; 96, Ray Fisher; 98-99, 132, 176 bottom, 194, Michael Abramson; 109, 171 top, Steve Liss/Liaison; 110, Eric Poggenpohl; 114, Sheldon Moskowitz/Liaison; 131, Mitch Kezar/Black Star; 147, Joe Traver/Liaison; 150 top, Michael Salas; 170 top, Peter Tatiner; 170 bottom, Richard Marin; 174, Jim McHugh

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Side Lines

Anathematizing Adam Smith

John Paul II

How many divisions does the Pope have? Stalin's successors, struggling to hold Poland in line, realize by now that the Pontiff has the moral equivalent of quite a few. But not only Communist totalitarians and Latin American plutocrats are feeling the lash of the Church's criticism these days. So are American businessmen who find their basic values under sometimes sharp attack from the pulpit, Protestant as well as Catholic. But we wondered: Does the Catholic Church understand economics? (Indeed, do some of the more liberal Protestant clergymen?) Our Michael Cieply interviews a prominent Catholic economist and finds a sometimes touching, frequently fuzzy-minded view of the world informing the Church's increasing pronouncements on social reality. Theology meets economics in this issue of FORBES, starting on page 50.

New world aborning

FORBES has been preaching for some time now that the nation is not so much in the grip of an economic crisis as it is in the midst of one of those exciting but frightening periods when the world is swept by what the late great Joseph Schumpeter called "waves of creative destruction." The emphasis is on the word "creative." Steel and autos may be shrinking, but computers and communications are exploding, and the service jobs replacing the manufacturing jobs are often better than the ones they replace. In this context, you will understand our delight when we saw the manuscript of Tom Murphy's column in this issue. Our Venture Capital writer interviews Tommy Davis, the dean of venture capitalists, who explains that the current boom in venture capital isn't just a speculative bubble but part of a wave of "creative destruction" that is creating a world where knowledge, communications and services are more vital than steel and copper and fossil fuels. Sample quote: "The fortunes of the past were made by stringing steel rails across the country or digging holes in the ground for minerals or oil. I came to believe that the fortunes of my generation would come out of men's minds." The interview is on page 200. Read it and understand why we at FORBES remain steadfastly bullish on America.

Who audits the auditors?

Our Richard Stern is one of the best investigative reporters in the business. In the past year alone Dick has been way ahead of the rest of the media in getting the lowdown on such characters as Robert Brennan of First Jersey Securities and Stanley Lurie of Saxon Industries. He also blew the whistle on the questionable goings-on at Baldwin-United at a time when much of the media still regarded Morley Thompson as a miracle man. This issue Dick sniffs around some smelly doings at Fox & Co., one of our large public auditing firms. Was it just an accident that Fox audited the books of such companies as Saxon Industries, Flight Transportation and O.P.M. Leasing, swindles all? Dick raises another question, an explosive one for Wall Street. It is this: Can investment bankers claim due diligence in securities offerings if they rely on the word of public accounting firms, which later turn out to be wrong or worse? All this and more is in "In whom do we trust?" which begins on page 38.

James W. Michaels
Editor

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Trends

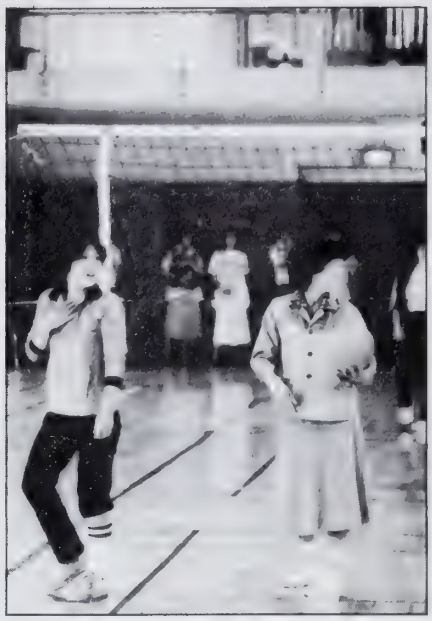
Edited by John A. Conway

Into the pool, everyone

Car pools and other company transportation programs are gaining in popularity regardless of dipping gasoline prices, according to a new report by Nathan Weber, a city planner working for New York's Conference Board. Surveying 238 companies, he found that 68% promote and administer car pools, 57% operate van pools, 29% subsidize employees' mass transit fares and 9% run charter or subscription buses. Also, he reports, one company in eight was providing management aid to local transit agencies. Weber predicts these programs will expand because, he says, fewer Americans can afford the high cost of driving to work. (The median age of the 107 million cars on America's roads last year was 6.2 years, according to a report compiled by Detroit's R.L. Polk.) While company car pooling programs began as energy-saving employee benefits, they were also aimed at solving air pollution, traffic and parking problems, the Conference Board says. Workers come out ahead, says the report, and companies recover much of their cost through cash fares, payroll deductions, depreciation and tax credits.

Who's happy now?

Despite conventional wisdom, American workers are more satisfied with their work than their Japanese counterparts, says a study of 3,549 U.S. workers and 3,638 Japanese by researchers at Indiana University. The study matched workers in the transportation equipment, electrical machinery, food, chemical, printing and publishing, prefabricated metals and nonelectrical machinery industries. "Recent commentary saying the Japanese workers had higher morale, were motivated to work harder and were more committed to corporate values needs re-evaluation," says IU professor James R. Lincoln, one of the lead researchers. Some 68% of the Americans said they were willing to work harder, but only 44% of the Japanese would do so; 36% of the Americans accepted their company's goals as their own, but only 15% of the Japanese did so. A huge majority (88%) of the American workers had a family feeling about their companies, while only 36% of the Japanese felt so. Americans were also more satisfied with their work tasks, supervisors and the way they spend their lives.



Japanese workers warm up
Are Americans so different?

The Japanese won out on company loyalty. Only 24% of the Americans but 43% of the Japanese said they would turn down work for higher pay to stay at their present companies, the study says.

Caveats for all

Virginia Knauer, director of the U.S. Office of Consumer Affairs, has run up her own glossary of what could be called "consumer English." Samples:

- "Free"—you often end up paying.
- "Only a few cents a week"—more expensive than it seems.
- "Sale"—some stores have perpetual sales, usually at regular prices.
- "Lifetime guarantee"—whose? yours or the product's?
- "Just sign here"—stop immediately and read.
- "Charity"—check it out.
- "Secret cure"—could mean quack; ask your doctor.
- "Let me show you something better"—bait-and-switch, and illegal.
- "Natural"—frequently a lot more expensive.

The home market

Prices of new homes continue to rise at a rate of 14% to 15% a year, because there is less than a six months' supply on the market, according to Jack Carlson, chief economist of the National Association of Realtors. New homes went up 1.2% in February to a median price of $75,100. February's bad weather, he notes, kept new home sales at about 43,000, the same as they were in January. Tags are also moving upward as lower mortgage rates bring more buyers into the market.

The Japanese touch

Kazuo Nakagawa, president of Honda of America, added one grace note to this month's opening of the Japanese manufacturer's 1-million-square-foot plant in Marysville, Ohio. Nakagawa calls the 2,000 employees who will turn out 150,000 Accords annually "associates," not workers. Neither the Accord site nor the next-door Honda motorcycle plant is organized, but the United Auto Workers have a campaign going.

The age barrier

A coalition of senators—including Democratic presidential candidate John Glenn—is backing a new bill to abolish mandatory retirement at age 70. GOP Senator John Heinz is a principal sponsor, and Florida's Claude Pepper has a companion measure in the House. Opponents include the U.S. Chamber of Commerce and the National Association of Manufacturers, but it should win at least tacit support from 72-year-old Ronald Reagan, who isn't endorsing any law but strongly favors letting workers stay on the job after 70. The country's colleges opposed a similar bill last year. But they are backing this one because it contains an exemption that will allow them to continue to forcibly retire tenured personnel at age 70 for the next 15 years. The new bill, however, has not mollified many other opponents. For example, it makes age discrimination subject to jury trial, which businessmen fear would mean a new rash of suits. (Currently, these cases, like those involving race and sex, are not heard by juries.) What would be the bill's effect on the economy? The Labor Department concluded in a study in 1978, the year the retirement age was lifted from 65 to 70, that eliminating retirement age limits would add only about 200,000 to the work force.

Death on the highway

Automobile accidents account for more than half the accidental deaths in the U.S. each year, and more than one-third of the victims are 15 to 24,

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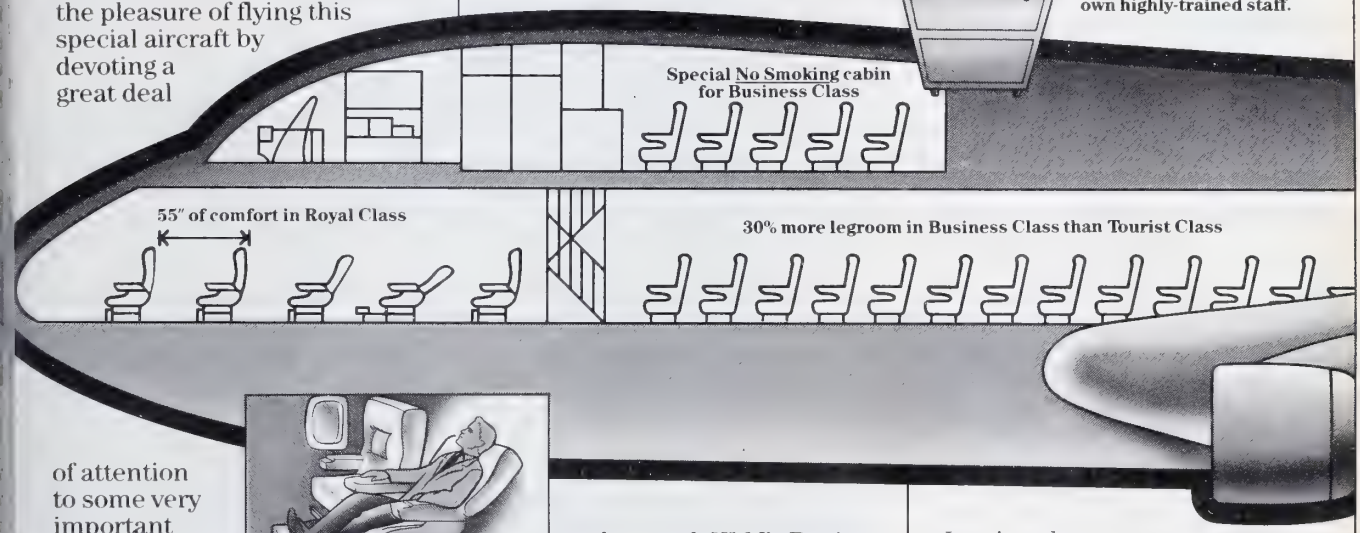

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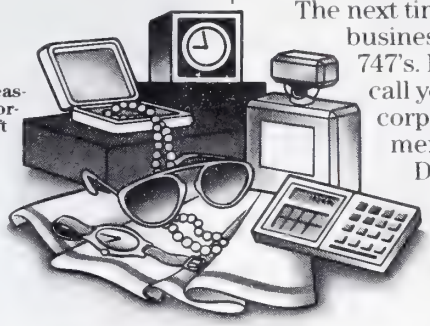

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says a new report by Dennis McCornac of the National Bureau of Economic Research. The Cambridge, Mass.-based organization found that more than 700 lives a year could have been saved if all the states had raised their drinking age to 21 in the late 1970s. Only five states permitted alcohol sales to those under age 21 before 1970, the report says; by 1975, 25 states allowed them. But because of increases in fatal accidents involving teenage drivers, 17 states had reinstated 21 as the legal drinking age by 1982. McCornac found that lowering the drinking age raises the number of motor vehicle deaths in bordering states as well as in the state directly involved.

Why there's room at the top

Chief executives had best get their guard up when the merger siren calls. Close to 90% of the CEOs absorbed by acquisition do not survive as top officers, says a study by Ward Howell International, an executive search firm based in New York City. Ward Howell tracked CEOs whose firms were acquired in 100 mergers two and four years after the takeovers. (The mergers, in 1976 and 1977, ranged from $42 million to $2.2 billion, with a majority over $100 million.) More than half of the CEOs were still working for the takeover company in later years, but only 10% held one of the 5 top slots and less than 20% ranked among the top 20. Only 9 of 86 were top executives with the new parent two years after the acquisition. These numbers, says Gilbert Dwyer, a Ward Howell partner, help explain the rise of "golden parachute" separation arrangements for top brass. "Chief executive officers have good reason to be wary," he says.

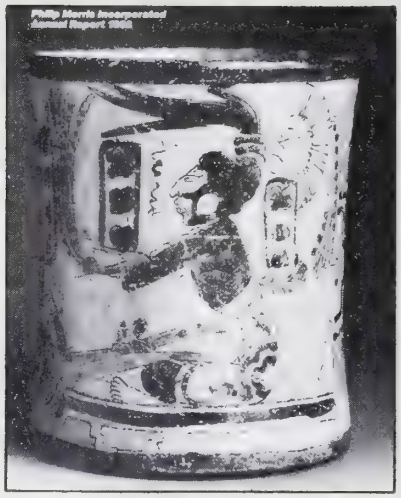
Money in, money out

The same tight rein that held down new investment within the U.S. was applied last year to investments by American companies abroad, according to a count by the Conference Board, the New York-based business research group. The reverse flow from overseas—foreigners investing in the U.S.—also declined, but nevertheless ran well above U.S. spending in foreign countries. American manufacturers made 193 foreign investments last year, while outsiders made 271 on this side of the water. Favored countries for U.S. investment dollars were Canada, Great Britain, France, West Germany and Japan. Nearly one in five foreign ventures in 1982 was in electrical and electronic equipment, while chemicals slipped to second. A sign of caution: the continued preference in 1982 for developed countries, where controlling interest in the new ventures could be ensured. (A recent survey conducted by the Department of Commerce showed that U.S. firms were holding a controlling interest in 88% of the 25,000 subsidiaries they have abroad.)

The richest counties

Half of the ten highest-income counties in the U.S. are in Alaska, says a new survey by Dallas-based economic consultants Criterion Corp. The 1,098 residents of Alaska's Bristol Bay County top the list with their median household income of $46,700, thanks to the commercial salmon fishing industry. Other Alaska counties rank second, fourth, fifth and seventh. Colorado's Douglas County (near Denver), with 28,500 residents, ranks third, highest in the lower 48 states. Douglas' median household income is $40,475. Sixth is Virginia's Fairfax County, with 626,000 residents and a median household income of $38,150. Not far behind are the 76 folk of Loving County, Tex., whose petroleum and gas operations on the southern border of New Mexico pump the median income there to $36,900, the eighth highest in the nation.

The Marlboro Mayan



An ancient Mayan puffing on a very 20th-century-like cigarette adorns this year's annual report of Philip Morris. The pre-Columbian vase depicting what may be the world's earliest smoking endorsement was acquired by the cigarette company in 1973 and is now on loan to the American Museum of Natural History in New York.

The big leisure dollar

Consumers spent $60.5 billion last year on media products (newspapers, television, radios, movies and electronic equipment), according to a new report by Knowledge Industry Publications of White Plains, N.Y. Total spending on these products was up $24 billion, or 66%, from the $36.5 billion consumers laid out in 1978; arcade and home video games alone accounted for $9.7 billion. By contrast, outlays for television, radios, records, audio equipment and movies grew only $2.1 billion, or 9%, between 1978 and 1982, says the report, and their share of overall media spending dropped from 61% to 41% in the same period. Newspapers and magazines came out a little better: Their share of spending dropped from 31% to 29%, but consumers bought $6 billion more print media in 1982 than in 1978. The study says in 1982 the average household spent $210 for newspapers and magazines; $294 for movies, radios, television, records and stereos; and $223 for electronic games, cable and pay TV, video cassette recorders and home computers. By 1987, it forecasts, Americans will shell out $89 billion for media, with new electronic equipment such as home computers increasing its share of that market to 35%.

Thinking the unthinkable

The White House intends to keep grappling with that incredible hulk, the federal civil service. For one thing, it wants to revise the retirement system. Half of all federal workers retire before age 60 (compared with 7% in the private sector), and those with 30 years' service—less for many because military time counts toward retirement—can quit with full benefits at the age of 55. The Administration wants to raise full-benefit retirement to age 65 and cut benefits for early retirees. The White House Office of Personnel Management also thinks that federal employees, particularly those in Washington, are overgraded and consequently overpaid. OPM says it will review how jobs are classified and duties assigned. Will it work? Probably not, given the numbers and all-pervasive presence of the civil service force.

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Portfolio managemen
The banks' new tools

Bank trust departments are turning their size to new advantage. They're applying their vast resources to creating sophisticated investment tools. How can pension plans benefit from the banks' new capabilities?

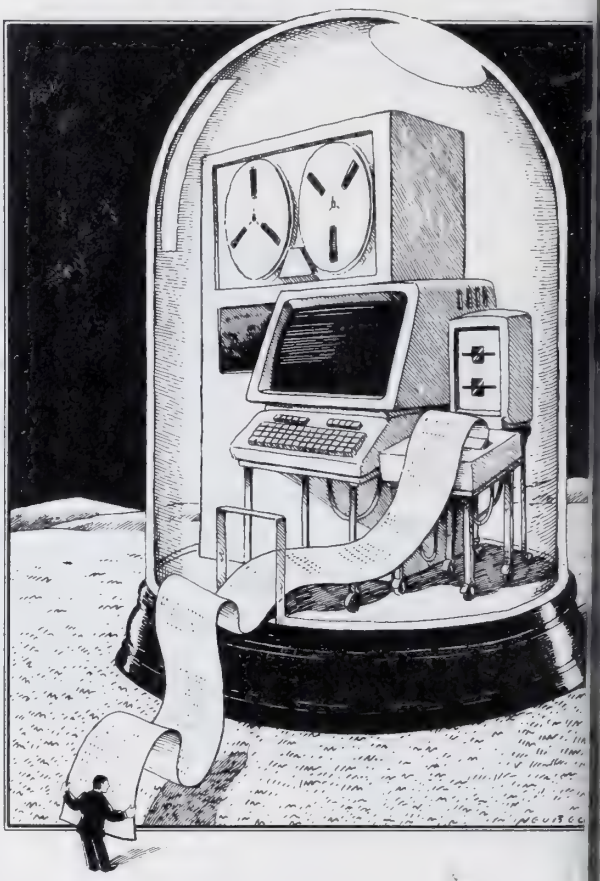
Today's pension plan sponsor faces a bewildering array of investments and investment managers. Banks, insurance companies, and independent counselors are fighting to invest pension dollars. The stakes are staggering: employee benefit funds now amount to $727 billion, or $2 of every $5 invested in this country.

Over the last decade, conventional investing wisdom came to favor the smaller counseling "boutiques." These specialized firms were seen as more flexible and up-to-date than banks or other large counselors. But the new demands of investment in the 1980's may have deprived the boutiques of their edge.

Bank trust departments are moving back into the limelight. As in other financial services, banks are using new technology to open up new investment areas and explore new techniques. They are using their financial resources to acquire the hardware, software, and expert personnel that sophisticated investment management now requires.

Broader based investments

To limit their exposure in any one field, most major pension plans divide their assets among various investment categories. Sponsors often use separate managers for each type of investment, to take advantage of each manager's specialty. But this division and subdivision of investment responsibility has created problems—problems that bank trust departments, with their broad capabilities, are generally well-equipped to solve.



Trust departments have the resources and exp to be more than just specialized managers. Mo now offer a broad menu, from real estate to int tional investments, from venture capital to bo immunization. And to manage this diversificat banks have taken the lead in developing the n computer techniques.

Without these techniques to digest huge amou information, some of the newest approaches to vestment wouldn't be possible. Portfolio insur index funds, specialty cores, and dedicated bo management, among others, are principally available from computer-intensive bank trust departments. In equities, too, trust departme are pioneering quantitative computer method These methods permit a research department once studied a few hundred investments to fol thousands—more systematically and objectiv than ever before.

ly can computers collect more information, n apply it in more meaningful ways. Dif- methods of analyzing securities can be red. Investment hypotheses can be tested. ends can be spotted. Rather than relying tically on any one or two considerations, tative methods make it possible to manipu- rger amounts of data for subsequent analysis.

oles for master trust

nvestments themselves growing more com- 's also become more difficult to keep track of The result has been spectacular growth in trust arrangements, in which a bank or ompany provides centralized custody and ement information for a large pension fund. ssets handled by the 25 largest master s nearly doubled from late 1979 to mid-1982, 3 billion.

mputer capabilities have dramatically d the role of master trustees. Traditionally, d little more than hold a plan's assets in safe- g and issue regular reports on them. Today, nore services are available from master s.

trustees now often manage index funds for ients, providing them with inexpensive core os. They can hold securities in worldwide , price assets in the different international s, and measure performance in various ies. Master trustees sweep excess cash to interest-bearing accounts. They earn nal income on securities by lending them to . Most important, they provide plan spon- th the information necessary to keep on top iple plans that are handled by many invest- anagers.

ing up with the sponsor's computer, a trustee can also provide on-line access to ent data. Information from different man- an be reported in one consistent format. And mat can be made compatible with the plan 's specific requirements.

Tracking total performance

Taken as a whole, banks' commitment to computer investment methods gives them a unique ability to monitor a fund's total portfolio. As master trustee or investment manager, these tools allow trust departments to measure and analyze the performance of each category of investment, and interpret the data in ways that lead to meaningful decisions.

More and more pension funds are finding that this kind of overview has become essential. The banks' new tools are actually the plan sponsors' new tools for managing portfolios of unprecedented size and complexity. In an industry where performance is measured by fractions of a percentage point, these tools can be critical to achieving peak performance.

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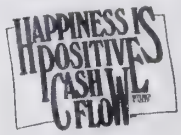

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Follow-Through

Unisex insurance

Two summers ago Congress heard another round of argument over whether insurance payments were unfair because they used actuarial tables based on sex (FORBES, *Trends, July 20, 1981*). Because those tables showed women living longer than men, the ladies paid less for life insurance and more for annuities; because the numbers proved them better drivers, they paid less for auto insurance. "Unfair!" cried the militant National Organization for Women. The industry disagreed. Throwing out the actuarials, argued Barbara Lautzenheiser, a senior vice president of Hartford's Phoenix Mutual, "would remove one of the primary pricing tools used by insurance companies." FORBES doubted whether the NOW argument or a bill backing it by Michigan Democrat John Dingell would get anywhere, but cautioned: "In politics, who knows?"

The caution was merited. Momentum has been building in Congress for unisex insurance pricing, and two bills in the hopper now appear to have a good chance of passage. In February the House held hearings on HR 100, Dingell's bill, and the staff will soon begin "marking up" the measure for full committee consideration. In the Senate, Republican Bob Packwood of Oregon has scheduled hearings this month for his identical version.

The health insurance and property and casualty companies still oppose the measure, but the rest of the industry has more or less capitulated. Insurers, Barbara Lautzenheiser says, concluded "that the political momentum had become too great." Last month a task force of chief executive officers also voted to compromise. One result, Lautzenheiser thinks, is a schism within the industry. "The giants can handle the problem," she says, "but the smaller companies may not be able to." Harry Hohn, an executive vice president of New York Life, disagrees. "Insurance companies already have to rearrange costs and prices at three-year intervals," he says.

Big or small, insurers agree that coping with unisex pricing will depend on whether Congress withdraws provisions, still in both House and Senate versions, to make any new law retroactive. Should that happen, Lautzenheiser says, the cost would be "devastating."

No one is quite sure what all this will cost the policyholders. Two years ago, however, the American Academy of Actuaries told Congress that if present actuarial tables, with their differences between the sexes, had to be scrapped, women would be paying $360 million a year more for life insurance, men $360 million less. Auto insurance would cost women $700 million more. Whether lawmakers come up with another solution—the betting is that they want the costs made more or less equal—the public will pay, regardless of sex.

The million-dollar anchor

"It is a desperate game for high stakes the electronic equivalent of newspaper circulation wars, an over-the-air version of the box office as arbiter of rise and fall in movieland," FORBES reported on the television news business two years ago *(Dec. 7, 1981)*. At the center sat the anchor men and women who charm their way into the homes of that 18-to-49 age group sponsors so covet.

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James Thurber's The War Between Men and Women
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Income may be subject to some state and local taxes. Net asset value is not fixed and fluctuates.

Follow-Through

five-year contract to anchor CBS national news; ABC's Barbara Walters and NBC's Tom Brokaw were also making upwards of $1 million a year. Even the foot soldiers in the TV wars were earning salaries that made them the richest people in their communities. True, fewer than 250 held down anchor slots at the networks and the ten top markets. But top bananas in almost all of the first 20 markets, including Detroit and Denver, easily drew handsome six-figure salaries, FORBES reported. Connie Chung, anchor for KNXT in Los Angeles, was getting an estimated $600,000 a year, Bill Kurtis of Chicago's WBBM drew an estimated $500,000 a year, and sportscaster Warner Wolf of New York's WCBS earned $450,000 a year.

Since then, these hefty salaries have gone even higher. A case in point is New York. At WNBC, anchorman Chuck Scarborough makes over $500,000 a year and reporter Dave Marash brings in $250,000. Last summer WABC dropped anchorman Ernie Anastos from its 11 p.m. news and put in former NBC *Tomorrow* host Tom Snyder, reportedly for a princely $700,000 a year. Anastos stayed off the air for five months. But last month he signed on again with WABC, this time for more than five years, to anchor the 5 p.m. local newscasts and work on network assignments. (Networks are chipping in on local salaries, says a high-powered West Coast agent.)

Anastos won't confirm or deny reports that he, too, will be making $700,000 a year. "But it is safe to assume that the anchorpeople working in New York are at that level," he says. "I was prepared to leave ABC, but after we talked, my decision was to stay with the company."

Why pay an anchorperson more than the President of the United States? Says Stephen Pinkus, president of New York's *News & Entertainment*, "People are making money because of those personalities—known in the business as 'the franchise.' "

Will the salaries continue to go up? "The trend is set," says one high-paid New York anchorman. "More and more money is being spent on local news because the stations are in a virtual dead heat." With that kind of situation, he says, the bidding is heavy, and it's just a matter of time before New York, Los Angeles or Chicago will see its first $1 million-per-year local anchorperson.

This announcement is neither an offer to sell nor a solicitation of an offer to buy these securities. The offer is made only by the Prospectus.

March 30, 1983

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Common Stock

(without par value)

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Needs versus wants

SIR: Re Gary Shilling's discussion of the flat tax *(The Tax Scene, Mar. 14)*, the government does not desperately need revenues. The government wants revenues. What our government desperately needs is responsibility and probity.
—James Edwards
Glennallen, Alaska

Costs of oil import tax

SIR: Your suggestion of a $10-a-barrel tax on imported oil *(Fact and Comment, Mar. 28)* would severely hurt the export market for our petrochemical companies as well as for any other energy-dependent industry. It would cause us to deplete our domestic oil reserves at a much greater rate.
—Gary Schuster
Newark, Ohio

SIR: Alternative suggestion: The Administration has been interested to delegate to the states certain social-care expenses, which the states have been unwilling to assume without supporting financial aid from Washington. The lower gasoline prices could be used by the states to increase their revenues through increases in the gasoline tax.

This would give the states much badly needed revenue while not making our exports noncompetitive.
—Harold T. Feren
New York, N.Y.

SIR: A part of that fee should be used to repair or replace our bridges, highways, tunnels, etc., rather than go into the general coffers.
—Alfred Zernik
Philadelphia, Penna.

SIR: Wow—with friends like you, who needs OPEC?
—Ed Bishop
Executive Director,
Oil Heat Institute of Washington
Washington, D.C.

SIR: Please cancel my subscription.
—Wilbert P. Gaston
Kilgore, Tex.

Sound premises, but . . .

SIR: Martin Feldstein ("The Dollar: Too Strong For Our Own Good," *Feb. 28*) has added the following theory to the general confusion about fiscal policy: Interest rates are high because of future budget deficits; high interest rates keep the dollar strong. One can conclude that reducing the deficits will therefore depress the dollar; a weaker dollar raises the dollar prices of traded goods.

Upshot: Reducing budget deficits will increase inflation.

Those who swallow Feldstein's premises must also accept the unusual conclusion.
—Alan Reynolds
Chief Economist,
Polyconomics, Inc.
Morristown, N.J.

Backsliding

SIR: Re this picture clipped from "Growing pains" *(Trends, Mar. 14)*, who pays for the back injuries suffered when the secretary's office chair inevitably rolls back on its casters?
—Benjamin Elkin
Coronado, Calif.

Physiologist Denise Kalnich
Shaping the secretary of the future.

Healthy threshold

SIR: Your editorial on the pharmaceutical industry ("Continuously Traducing Drug Companies Is Costly Stupidity," *Fact and Comment, Feb. 14*) was most gratifying. Based on research currently under way that is supported by an annual industry budget of more than $2 billion, we are on the threshold of resolving aspects of cardiovascular disease, cancer, senility and other disorders which have historically plagued mankind.

Perhaps with support from your colleagues in the media profession, the U.S. pharmaceutical industry can cease being "an unpopular cause."
—Ward S. Hagan
Chairman and CEO,
Warner-Lambert
Morris Plains, N.J.

Freudian slip

SIR: Perhaps it was just a Freudian slip, but SIPC stands for: Securities *Investor* Protection Corporation ("Stock options," *Feb. 28*), rather than Securities *Industry* Protection Corp.
—John R. Austin
San Francisco, Calif.

Disguised sales tax

SIR: Thank you for pointing out that a large fraction of the current Social Security benefits is really welfare ("On the dole?" *Mar. 14*).

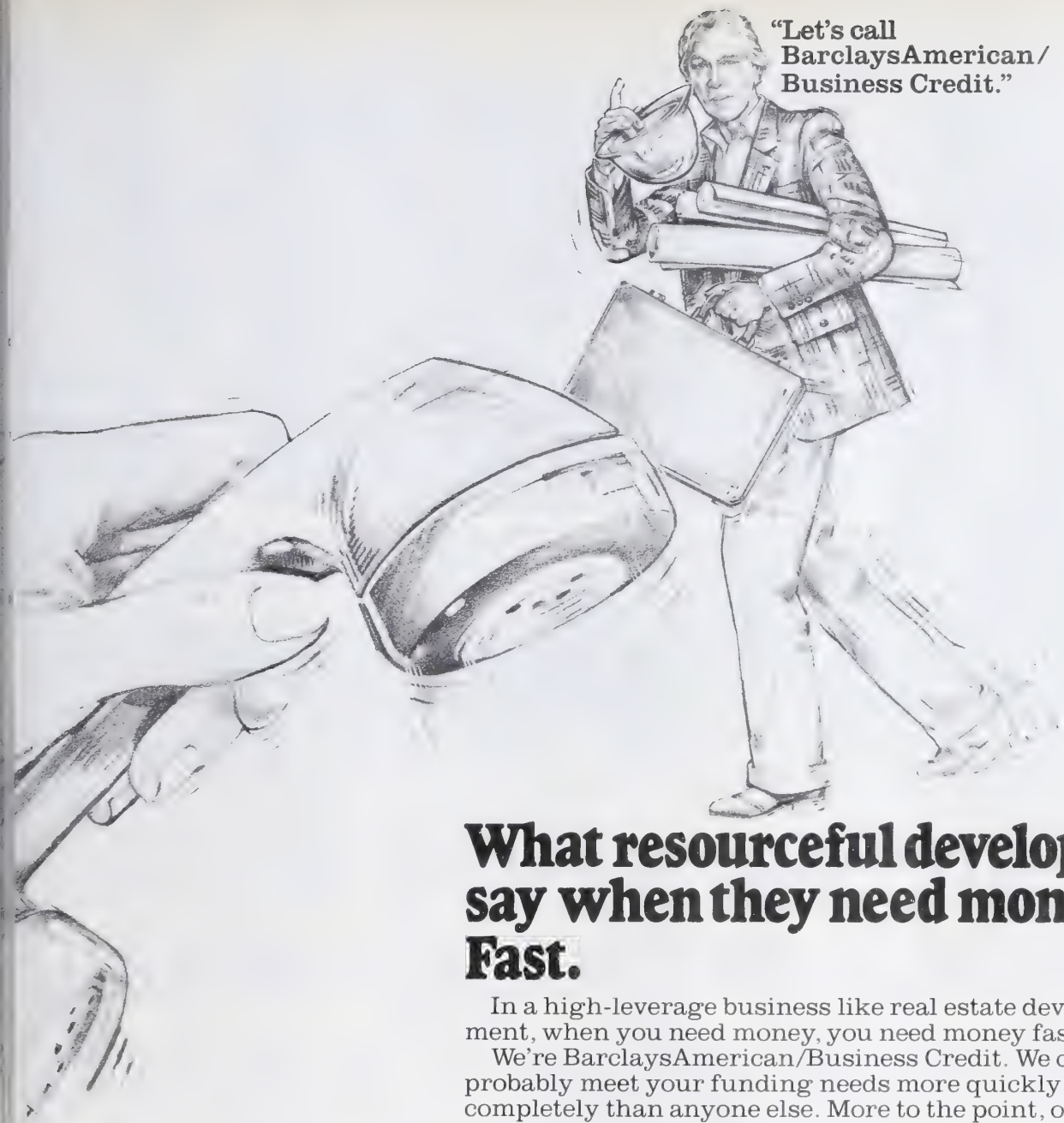
Next, you might point out that nearly half of Social Security is financed by the equivalent of a sales tax. The "employer contribution" portion of S.S. financing must be passed along to the consumer, of course, so that becomes in effect a sales tax on goods made in the U.S.

Why not impose a S.S. sales tax on all goods sold in the U.S., including those made abroad? Toyota would have less competitive edge over General Motors if it also had to contribute to S.S. in this country.
—Charles L. Larson
Sunnyvale, Calif.

Relatively poor?

SIR: Re your piece on me *(Streetwalker, Mar. 14)*. The facts. At the end of its first 22 years Revlon's volume was $32 million. Del's 20 years, ended in 1982, shows volume of over $66 million. My holdings in Revlon if held to the high point of $59 per share would have totaled about $77 million. Over the years I have been a private investor and have sold my holdings (other than gifts to family) at substantial profit.

So where does the needy relative tax come in?
—Martin Revson
New York, N.Y.



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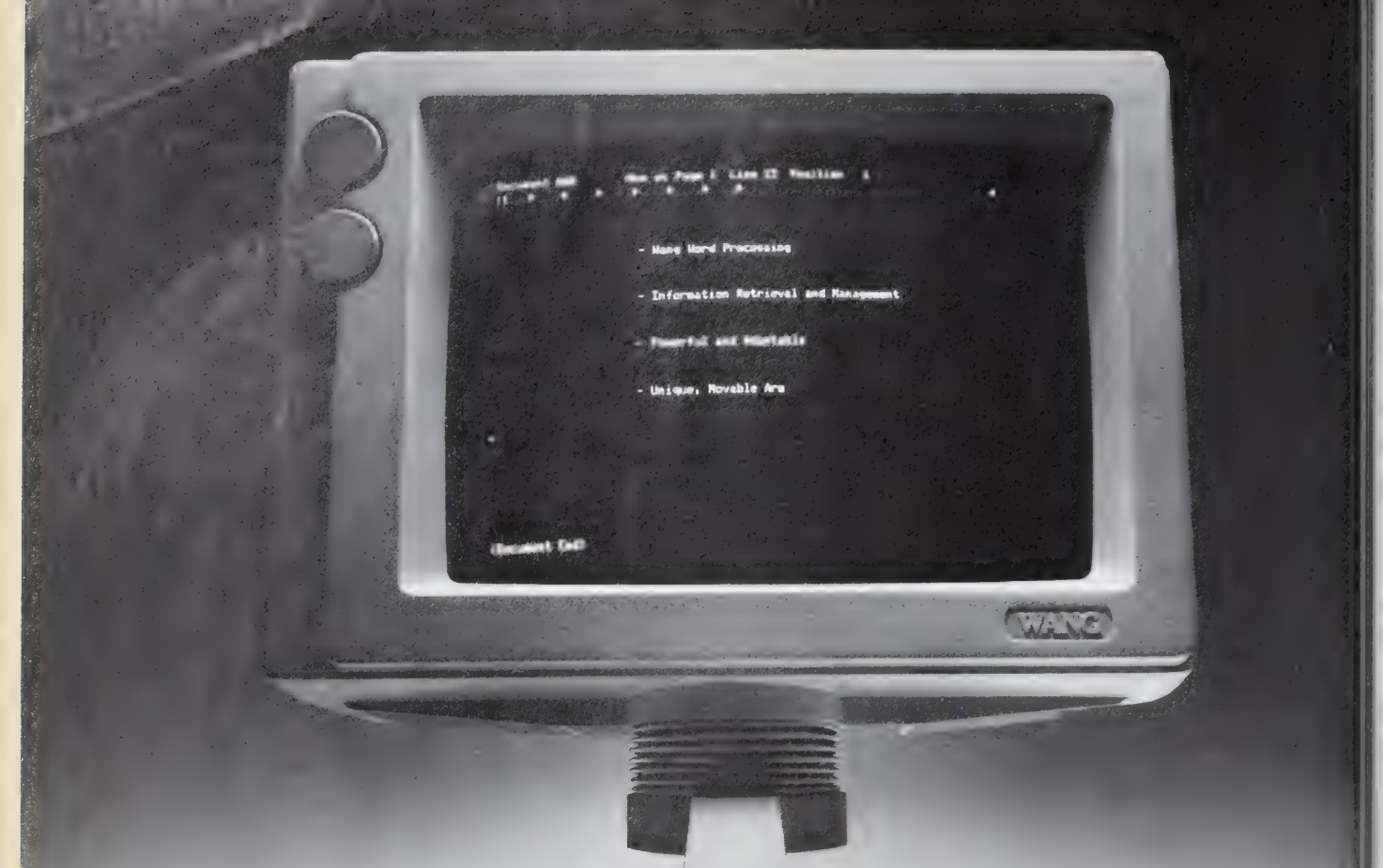

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We started building computers and word processing systems for the office when most computer companies were still building computers for the backroom. And ever since, Wang has been the leader in office automation.

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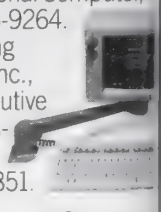
Wang also gives you a choice of the most popular software – including Wang Word Processing, the number one word processing in the world.

The Wang Professional Computer. In the race to office automation, it makes the competitio look like they haven't even starte

For more information on the Wang Professional Computer, call 1-800-225-9264. Or write to Wang Laboratories, Inc., Business Executive Ctr., One Industrial Avenue, Lowell, MA 01851.



The Wang Professional Compu

© 1983 Wang Laborat

*Benchmarks using CPU-intensive, interpretive BASIC

WANG

The Office Automation Computer Company

Fact and Comment

By Malcolm S. Forbes, Editor-in-Chief

WILL HOUSING'S RISE CONTINUE?

Yes. The Up months will be more frequent and greater than the intermittent Downs.

CURBED MONEY SUPPLY AND RISING INTEREST RATES

would make quite a pyre for Paul.

THERE'S NO "BUDGET VICTORY" IN A $175 BILLION DEFICIT

Who in their most extravagant partisan imaginings would have thought that a *Reagan* Administration would be so benignly indifferent to the prospect of budget deficits of unfathomable and mounting size? The Democratic House substitute is merely a worse assortment of spending, with negligible—and debatable—impact on the imbalance.

Passing a budget that includes a $175 (possibly $200) billion of red ink would be a dereliction of dangerous proportions, an insupportable, inexcusable risk to the rising rate of recovery.

Strangely enough, there seems considerably more alarm among the business and money men in Western Europe over our prospective mountainous budget imbalance than here. The fact that their recovery train can't move much without our engine building up some steam gives them reason for caring.

Thank goodness, under the leadership of Lehman Brothers Kuhn Loeb's Pete Peterson, a top-drawer bipartisan group of six former Cabinet members (former Treasury Secretaries W. Michael Blumenthal, John B. Connally, C. Douglas Dillon, Henry H. Fowler and William E. Simon; and Peterson, former Commerce Secretary) along with 500 eminent academics, business leaders and politicos are united in beating drums for a thoughtful spectrum of budget cuts that would reduce the deficit by $100 billion.

Let's hope they're heard—and heeded.

BILL'S JUST THE MAN TO RIDE TO EPA'S RESCUE

As EPA's nanny during its first three years of being, Bill Ruckelshaus knows and cares about what the Environmental Protection Agency is all about.

By cleaning house at the agency's top levels, the Administration gives him a chance to get them out of the appalling hazardous-waste hole they've dug. Outdoor-loving Ron Reagan isn't in favor of letting unwatched companies foul air, ravage landscapes and poison waterways.

It just looks that way, thanks to colossally inept appointees.

ROLL IN THE BARRELS AND WE'LL HAVE BARRELS OF SECURITY

Now is the time to fill at full speed our strategic oil reserves. And maybe make a big deal with Mexico that would assure it a market for its oil in a world of lessening demand, which would reassure its creditors—mainly U.S.—and at the the same time lighten a bit the IMF's load south of our border.

IN GROUND COMBAT, ESPRIT'S THE NAME OF THE GAME

In combat units—in any military unit—it takes time to develop awareness of one another's capabilities, to instill a sense of belonging, a sense of esprit de corps. At long last the U.S. Army is being organized into regiments, and new recruits will stay with the same one for the duration of their hitch. That's the way it's been in Great Britain, and the sense of loyalty and strong regard for the honor of their regiments is legendary.

PFC Dennis Forester pins new crest on Sgt. Robert Eby, as their unit joins the newly designated 327th Infantry Regiment, Fort Campbell, Ky.

The present personnel turnover rate of our army units is so high as to render them relatively ineffective.

Distinctive berets, boots and badges, when they've been won by blood, sweat and tears (which can be as near-real in training as in battle), have a power and a meaning beyond measure. Just put in the hands of our forces some high-tech weapons that have been proven by the Israelis in combat, and stop holding out forever for something even better, and we'll have a fighting force that is a force.

Our Green Berets, 101st Airborne, Rangers and our Marines have proven to be on a par with the most-storied, most-heralded elites of other nations. If the regimental concept is truly implemented and not just trumpeted, our army will be an infinitely more potent force.

NOT MANY CAN DIE

having done as much good as Barney Clark did.

THE FLAP OVER VOLCKER'S EFFORTS TO LOWER

the money supply is nothing compared with the controversy caused by Publisher John Fairchild's efforts just 13 years ago to lower the hemline. An illustration *(shown below)* accompanying a recent *U.S. News & World Report* feature comparing and contrasting the U.S. of FDR's day with Reagan's today brought this seeming non sequitur to mind.

Paul Volcker

John Fairchild

One finally won.

The battle to drop the miniskirt to midi not only rent the fashion world but had real consequence in the business world—textile, garment industry, department stores, and the banks that financed these major factors in the U.S. economy. John Fairchild and his *Women's Wear Daily*'s skirt-length battle were front-page news and *Time* cover subjects. The Fairchild fashion power, though as near-total then as it is today, seemed to suffer a reversal as the male caterwauling halted the hemline descent at the knees.

The uproar faded as, in due course, the hemline unravelled. For better or for worse, today it's not the midi but the mini that raises eyebrows, among other things.

And, for better or for worse, Paul's remaining period of prevailing is going to be shorter than the miniskirt ever was.

WWD *Front Page, 1970*

1983's style (in U.S. News*)*

1970's Mini

RESTAURANTS—GO, [illegible], STOP

● **Zinno**—126 West 13th St. (Tel: 924-5182). A delightful, unique combination of good Italian food, jazz-leaning combos, very spacious, sparkling space, happy, pronto service and reasonable prices. No wonder the uptown, midtown and downtown cognoscenti are abundantly present in this new Greenwich Village restaurant.

● **Auberge Suisse**—153 East 53rd St. (Tel: 421-1420). While it is still the best of the disappointing restaurant lot in Citicorp's towering city center, that's not really saying a lot. A fine hors d'oeuvres platter of crudités and splendid baked, fluffy Gruyère puffs. Traditional dishes good but not exceptional. Service slow.

● **K.O.'s**—99 Bank St. (Tel: 243-0561)—is no knockout as a steak restaurant, and I'm bewildered by the raves of some eminent and frequently reliable critics. The steak reminded me of the flavor of the long-frozen variety. Not a single, simple, baked potato in the whole steak house, only one-stuffed-baked, after the potato has been mixed with chives and sour cream. The pan-fried spuds were luscious to look at, mealy to taste. For hors d'oeuvres a couple of huge slabs of cheese-sprinkled, flavorless custard billed as zucchini frittata. K.O.'s has a stunning look and rock shrimp, but other than that, forget it.

● **Washington Street Cafe**—433 Washington St. (Tel: 925-5119). Manhattan's TriBeCa is below Soho, which means it's a bit below the salt for all the boutique-y eateries that flourish around the now very high-priced Big Apple art center. This friendly and attractively unpretentious restaurant is an oasis in what is a dinner-time desert. The unvoluminous menu has a happy variety of unhackneyed dishes, mostly good.

● **Tenbrooks**—62 Reade St. (Tel: 349-5900). The other TriBeCa oasis about which one could pretty much say ditto to the above.

● **The Russian Tea Room**—150 West 57th St. (Tel: 265-0947). Long famed, here's where Show Biz biggies, agents and their appendages gather for serious dealing—and eating. If you're into borscht, beef Stroganoff and blinis, join the crowd.

● **Chatfield's**—208 East 60th St. (Tel: 753-5070). Thanks to a dozen first-rate movie houses within the three blocks around Bloomingdale's, restaurant-hunting New Yorkers abound in this area of the Big Apple. With only a couple of exceptions, it's surprising how mediocre the restaurants are, including those in Bloomies itself. Chatfield's is a happy exception. Really great pasta—confirmed by my expert-on-the-subject dinner guest. The double-rib lamb chops, spiced by some Roquefort in the covering sauce, is knockout unique. Available wines are inexpensive but too few, and the reds, with one exception, are all too fresh. A warm atmosphere, with food mostly up to the prices.

TO PUT WHITE WINE AHEAD
of red is like preferring first base to second.

WHOEVER DESIGNATED SEASONS'
first days certainly knew nothing about weather.

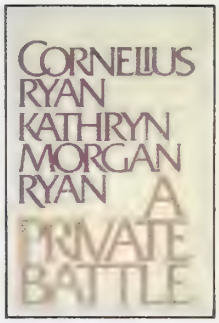
BOOKS

● **Megatrends**—by John Naisbitt (Warner Books, $15.50). With startling clarity John Naisbitt brings into focus America's vast underlying, long-undetected shift from an industrially dominated economy to one where high-tech services and information are becoming the major elements in keeping this nation's economy the world's most consequential.

Excerpts: *We are always awaiting the new magical pill that will enable us to eat all the fattening food we want, and not gain weight; burn all the gasoline we want, and not pollute the air; live as immoderately as we choose, and not contract either cancer or heart disease.*

In our minds, at least, technology is always on the verge of liberating us from personal discipline and responsibility. Only it never does and it never will. The more high technology around us, the more the need for the human touch. . . . As computers begin to take over some of the basics of education, schools will more and more be called upon to take responsibility for teaching values and motivation, if not religion.

● **A Private Battle**—by Cornelius Ryan and Kathryn Morgan Ryan (Simon & Schuster, $12.95)—is the step-by-step story of famed author Ryan *(The Longest Day, A Bridge Too Far)* from the day he learned he had cancer to the day he died of it, four and a half years later. Using his diaries, his wife, a well-known author herself, tells a story that is sadder than she realizes—not so much about cancer's tragic course, but about their relationships with their children, their finances and his bitterness toward the medical profession and hospitals.



Excerpt: *The plague of prolonged illness is the constant tendency one has toward self-pity. It is an affliction that I try harder to reject than the physical pains which, in spite of everything, daily intensify. While I believe that 90 percent of the battle resides in one's positive state of mind and a strong determination to win, willpower and mood are constantly undermined by cancer. It erodes not only the body but dignity and self-respect. The most difficult art to perfect is the art of being ill gracefully.*

Other Comments

Often comments by others stimulate, irritate, abuse or amuse this editor's mind.–MSF

Men in White Coats

"Chrysler has made the most remarkable recovery ever from a financial point of view. If you called a year ago and asked odds on Chrysler doing the third-largest equity offer a year later, you would have gotten either odds of 10,000 to 1 or the men in the white coats."

—Robert Altman,
Lehman Brothers Kuhn Loeb,
to the *New York Times*

Buckshot from Spinney

The crux of [Pentagon analyst Franklin] Spinney's analysis, titled *The Plans/Reality Mismatch,* is that the Administration's $1.6 trillion military buildup (which would amount to $20,000 for each U.S. household over the next five years) is likely to be underfunded by as much as 30%. This means that unless major new weapons are eliminated or other drastic changes made, the final bill may be $500 billion more than expected. The latest findings are a sequel to a 1980 Spinney report, *Defense Facts of Life,* which argued that the pursuit of complex technology has resulted in the production of weapons that are high in cost, few in number and questionable in effectiveness. That analysis gave impetus to the incipient military-reform movement, but had little impact within the Pentagon. Indeed, the military brass has taken to Spinney's findings like ducks to buckshot.

—by Walter Isaacson, *Time*

Craw Sex

Austin, Tex. (AP)—A resolution proclaiming Mauriceville as "The Crawfish Capital of Texas" was approved today, 7-0, by the House Agriculture and Livestock Committee. Committee members argued briefly over whether to refer to the tasty shellfish as crawfish or "crawdads." Representative Robert Saunders, D–La Grange, said "crawdads" was a sexist term and suggested "crawpersons" instead. Committee members agreed to "crawfish" as a compromise.

—*The Orange Leader,* Orange, Tex.

Faulty Training?

In a recent poll, one out of three corporate executives said they think that most of the managers in charge don't know enough about technology and do not push innovation. . . . David Vogel, who teaches in the School of Business Administration at the University of California at Berkeley, asks the provocative question: "Why are the nations with the most developed systems of professional management education, the United States and Great Britain, performing so poorly, when two nations that provide almost no professional management training, Germany and Japan, have been the outstanding successes of the postwar period?"

—*Megatrends,* by John Naisbitt

Drawing by Stevenson, © 1983 The New Yorker Magazine, Inc.

"You may switch to the less expensive wine now."

Laws are best explained, interpreted and applied by those whose interest and abilities lie in perverting, confounding and eluding them.

—Jonathan Swift, *Gulliver's Travels*

Buddies Are the Kings

In the stress and chaos of combat people fight less for "king and country" than for their buddies. If the person next to them is not a buddy but a stranger, they are more apt to sit out the fight or break and run.

Cohesion can develop only when a unit contains the same people for long periods. It takes time for strangers to come to rely on one another. Today we do not provide that time. Many Army combat companies have a personnel turnover rate of 25% every three months, the highest in the world. So our troops remain strangers to one another, and strangers do not fight well together.

—Senator Gary Hart
New York Times Magazine

Hold One's Seat

A commercial traveler from England arrived at the Joint Station in Aberdeen one Friday afternoon, en route for Maud. With time to spare, he boarded the Buchan train, found an empty compartment and placed his briefcase and rolled umbrella on a corner seat before withdrawing to the station buffet for a cup of tea. When he finally returned to the train he found his particular compartment was fully occupied with solid men of the soil, his briefcase and umbrella now dismissed to the rack above. "Excuse me, gentlemen, when a man puts his briefcase and umbrella on a seat it rather indicates that he has reserved that seat—at least in the part of the world where I come from." Whereupon the Buchan farmer in the corner taking his pipe out of his mouth and surveying the Sassenach with measured disdain, replied: "Ah weel, mi mannie, in this pairt o' the world it's arses that coont!"

—*A Grain of Truth,* by Jack Webster

OR A U.S. CORPORATION LOOKING OR A NEW OWNER, VE LOOKED BEYOND THE U.S.

he owners of New York Twist Drill, ooked for buyers beyond the ected boundaries—and found Laird Group, Ltd., a first-class UK oration.

Result: a successful transatlantic and increased liquidity for the le who had founded New York Twist Drill and built its success over the past 30 years.

One example of how Citicorp's Capital Markets Group looks beyond borders to give you a global view—and widen your world of opportunities. Last year our network of 30 merger and acquisition professionals closed 19 transactions worth more than $1.4 billion.

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And in a Series

DEMAND WAS GROWING. SO WERE PRODUCTION COSTS. INCREASED PRODUCTIVITY WAS THE SOLUTION... BUT COULD OUR PEOPLE ACHIEVE IT?

MAZDA'S 126.4

Anyone who has watched Mazda over the past seven years has witnessed something out of the ordinary.

An extraordinary increase in productivity.

Productivity has risen 126.4% as production volume climbed from 19.3 vehicles per employee in 1975 to 43.7 vehicles in 1982.

This dramatic increase was our solution to the problem of gaining control of production costs which began to spiral rapidly upward during the mid-'70s.

Increased productivity also allowed us to satisfy a growing demand for our pro[illegible] markets around the world. In

By helping to design work motion charts, our people are making assembly line operations more efficient.

CY 1982, this demand thrust Mazda above the 1.1 million-unit mark in production, and once again made us the third-largest automaker in Japan.

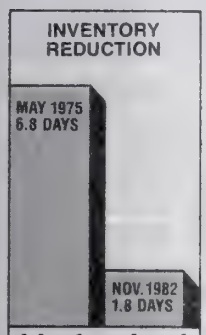
A MAJOR REDUCTION OF INVENTORY.

Our plan to increase productivity was vast in scope. Yet, in essence, it was but an effort to reduce costs while continuing to produce high quality automobiles in the shortest possible time.

Our *Operation 50* program is one example of this effort. It worked to reduce our inventory of in-process production parts and materials by 50% over a three year period. And continuing efforts have resulted in even further reductions as inventory has been trimmed from 6.8 days supply in 1975 to only 1.8 days in 1982.

OLUTION

Inventory eduction esulted in a remendous avings in xpenses. It lso revealed nags in the roduction rocess which vould have therwise emained idden. By eliminating these nags, we were able to achieve significant improvement in oth the flow of production and ne reliability of production-elated equipment.



Mazda reduced inventory 73% since 1975.

A NEW PRODUCTION SYSTEM.

nventory reduction ushered n our new system of syn-hronized production.

We no longer maintain arge inventories of parts and aterials. Rather, we bring nese forward only as we need nem, and schedule them to rrive at our pro-uction lines just n time for the next ep in the manu-acturing process.

This kind of ynchronization emands tight co-rdination between ur various divi-ons, as well as etween us and ur suppliers and neir subcontractors. In fact, ll of our domestic suppliers nd subcontractors have met ur standards for in-house uality control and now deliver directly to the production lines without any ongoing inspection on our part.

AUTOMOBILE PRODUCTION IN JAPAN IN 1982	
Maker	Units
1 Toyota	3,144,557
2 Nissan	2,407,734
3 Mazda	1,110,164
4 Honda	1,020,078
5 Mitsubishi	969,445
6 Suzuki	603,153
7 Subaru	513,506
8 Daihatsu	464,245
9 Isuzu	404,871
10 Hino	61,445

Mazda is Japan's third largest automaker.

PEOPLE PROVIDED THE SOLUTION.

Our people, workers and management alike, figure prominently in our effort to increase productivity.

Since 1975, they've contributed more than *six million* suggestions to improve productivity and quality—and more than 50% of their ideas have been adopted. Nearly 2.6 million suggestions were generated in 1982 alone. More than were received by any other automaker in Japan.

Sixteen of our people were also selected to spearhead Mazda's *MM Operation*, a program which finds them working closely with production management in an ongoing effort to spread proven productivity methods throughout the production system. And their participation has paid dividends, both in terms of improved productivity and higher quality standards.

A MORE PRODUCTIVE FUTURE.

Our goal is to create a production system that is capable of responding rapidly to shifts in market demand. And we've already made considerable progress toward this goal.

For example, our new Hofu plant, which began operation in September 1982, is capable of simultaneously assembling nine different automobile body types in three different model variations. And with 155 computer-controlled robots, Hofu clearly represents the state-of-the-art in terms of automation and production flexibility.

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Fact and Comment II

By M.S. Forbes Jr., Deputy Editor-in-Chief

WOULD YOU BELIEVE IT? BRITAIN IS TURNING AROUND

LONDON—You don't hear talk anymore about the "British disease." With a little luck, in fact, this perennial sick man of the industrial world could become a minor economic miracle in the years ahead.

The reason for this extraordinary turnaround is Mrs. Thatcher, who, for all of her faults and false starts, has dramatically changed the rules of the game—for the better.

Don't be misled by the tumbling pound on the foreign exchange markets. It has little to do with fundamentals. Sterling was grossly overvalued, in large part because of North Sea oil. Two years ago, everyone thought petroleum prices could only rise. The pound was pulled up in this euphoria, even though North Sea taxes account for only 5% of U.K. budget revenues.

Otherwise, the symptoms are good. A straw in the wind: For the first time since World War II, the average interest rate last year on 20-year British government bonds was slightly lower than equivalent U.S. bonds.

Her Cure Is Working

Mrs. Thatcher has put British industry through the wringer. Manufacturing output today is not far below what it was in 1978, but manufacturing employment is down almost 25%. In 1981-82, with the economy in steep recession, British productivity went up an astonishing 7% to 8%.

Recessions balloon budget deficits, but the U.K.'s shortfall is now the smallest, proportionately, in the West. After a shaky start, the Prime Minister and her cheerfully dogged Chancellor of the Exchequer, Sir Geoffrey Howe, have gotten a good grip on government spending. Inflation is the lowest among economies today, except for Switzerland and the U.S.

There are other good portents. Although the sceptered isle lags behind Japan and the U.S. in developing and applying high technology, it is ahead of continental Europe. The Tories have provided incentives for individuals to invest in new ventures, and there is a market now for new unlisted securities.

While bankruptcies are at record levels, so are new company formations, a vital sign of the creativity and entrepreneurship Britain so badly needs to reduce its enormous unemployment.

British managers are learning to manage, and workers now realize that jobs and wages are dependent upon a sound economy. As the brilliant chief of the General Electric Corp., Lord Weinstock, told this writer, "Managers have got back a lot of their self-respect and self-confidence. Organized labor is less obstinately hostile to change. There is a far more cooperative attitude."

The key factors in changing the economic face of Britain were Mrs. Thatcher's income tax cuts of 1979 (which meant executives could be paid more in cash than in perks), her abandonment of rigid monetarism in 1981 (Volcker followed suit a year later, which enabled our stock and bond markets to rally, just as they had done in Britain), reduced subsidies for nationalized industries and the growing incentives for venture capital.

True, unemployment is unnervingly high, over 13%. But this level is, sadly, not far out of line with the rest of Europe and will start falling at a faster-than-anticipated pace as the U.K.'s economic recovery picks up steam later this year.

Don't Blame Character

Many observers still make much of how the British "character" hobbles this country's ability to compete effectively. Maybe so, but there's nothing in it that can't be overcome by good management, as the Japanese have shown in the manufacturing facilities they've opened here. Productivity has been spectacular.

Until recently, British executives had little incentive to do what they should have been doing, thanks to the absurdly high income tax rates that existed before Mrs. Thatcher took office.

For all the problems still plaguing this economy, the outlook is better than it has ever been in the post-World War II period.

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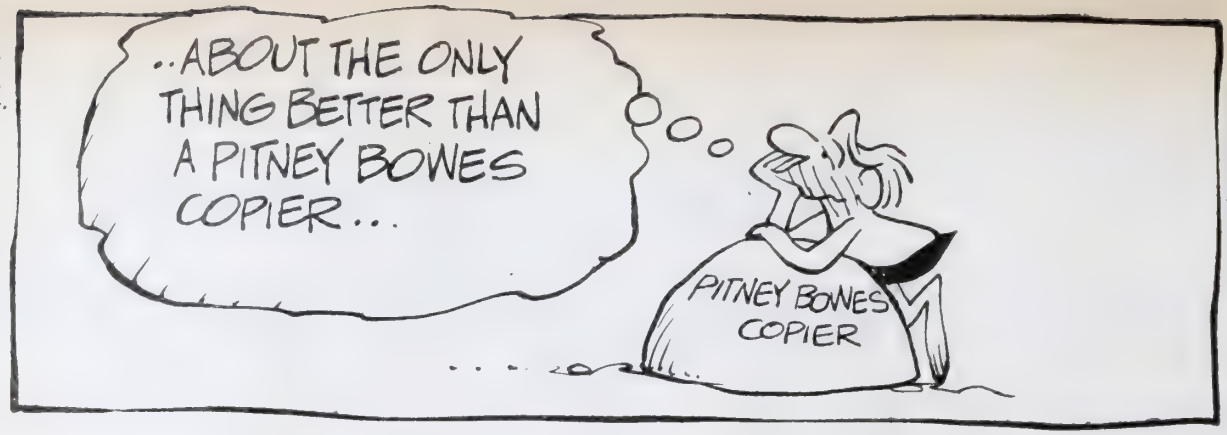

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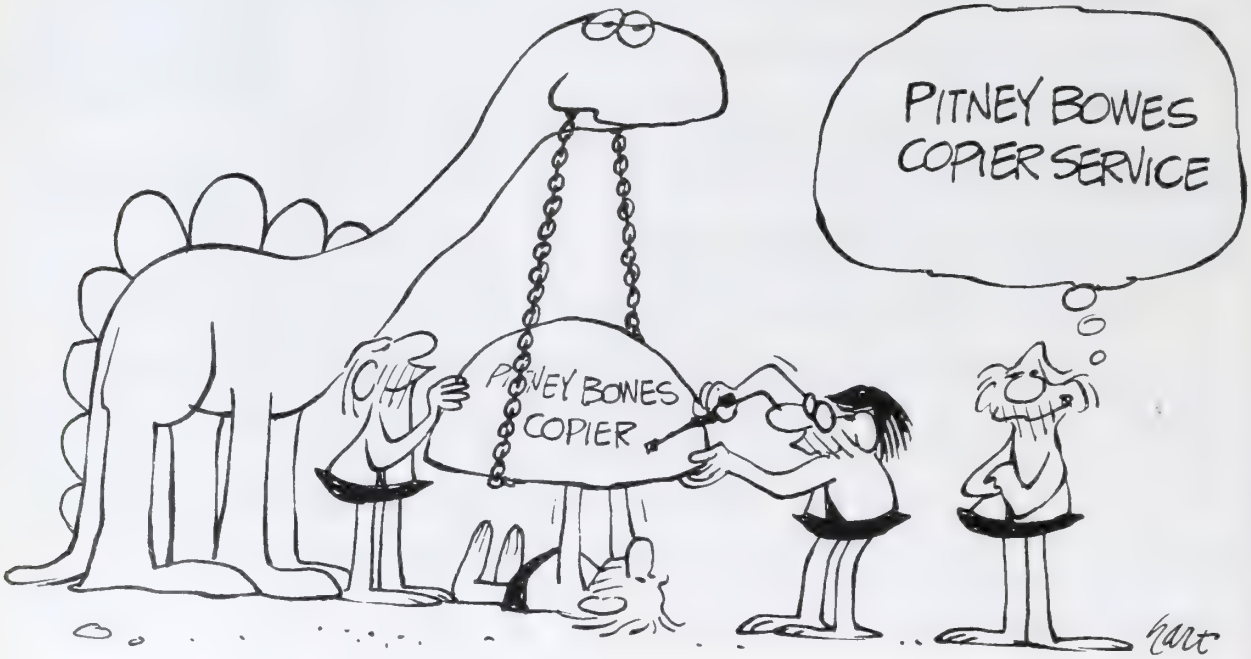

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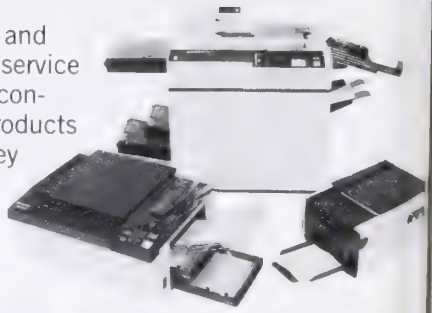

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Edited by Thomas O'Donnell

CASH FLOW IS THE KEY

Profit gains will be modest but they aren't the whole story

CORPORATE PROFITS WILL RISE BY AT LEAST 15% this year, a modest figure that scarcely explains the exuberance of the stock market. There's more, however. American business will be healthier in 1983 than that 15% suggests. The big gain will come in cash flow, a less prominent but basically more important yardstick.

Cash flow is made up primarily of retained earnings plus depreciation. Depreciation allowances were liberalized by the 1981 tax reform act. Commerce Department numbers suggest that in 1983 the reforms will allow corporations to retain about $18 billion that would otherwise have gone to the government. This enrichment of cash flow in combination with the strict limits most companies are putting on capital spending should lead to a rapid improvement in corporate liquidity. The trend is already under way. In last year's final three months, says Manufacturers Hanover's economist Marc Goloven, cash flow exceeded corporate outlays by $7 billion at an annual rate—the first corporate surplus since 1975's fourth quarter and only the fourth time in any quarter since 1964 that cash flow exceeded business outlays.

Rebuilding liquidity comes first, then capital spending

CASH FLOW WILL BE WAY UP THIS YEAR for two other reasons as well: heavy inventory liquidation and cutbacks in overhead. Thus the stage is slowly being set for an improvement in capital spending. The drama will unfold like this: Consumers will lead the recovery this year. When their spending starts to ebb, business outlays will pick up the slack. That should be in early 1984.

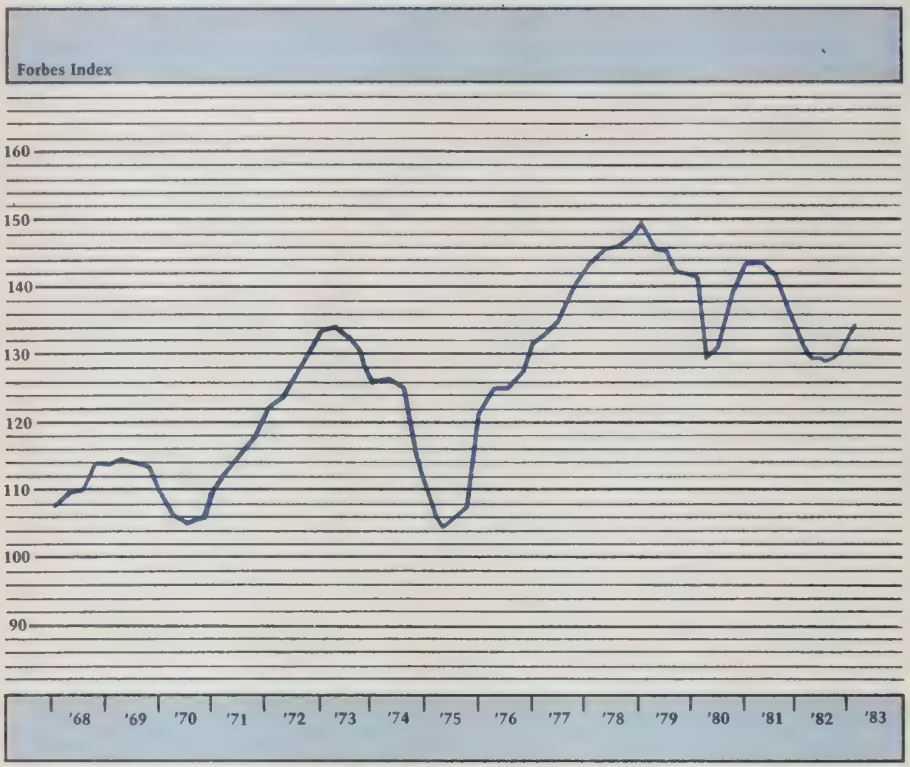
In the meantime, the quality of corporate earnings will improve. "Speculative inventory profit caused by high inflation will become rarer," points out Data Resources economist Allen Sinai. In short, with inflation running at 10% and higher, profits looked much better than they really were.

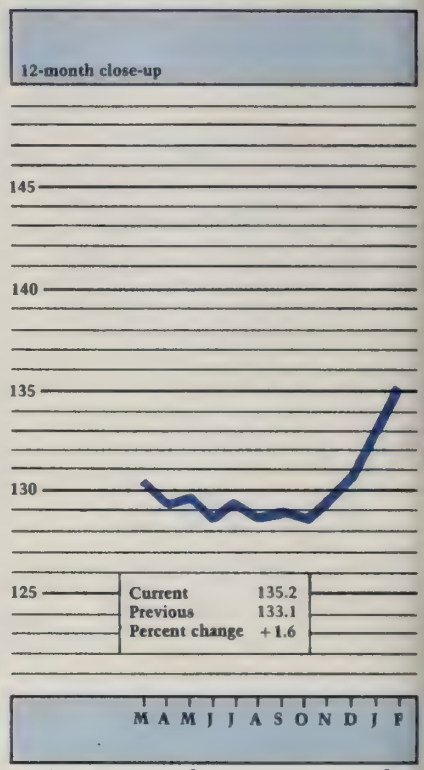
All this helps explain why the dreaded "crowding out" situation will not materialize. Business will be generating internally much of the money it needs, and thus heavy Treasury borrowing won't send interest rates climbing again. The trend of interest rates remains down.

Moving from a vicious cycle into a virtuous cycle

IN SHORT, THE CAPITAL MARKETS ARE EMERGING from a vicious cycle into a virtuous cycle: The financial markets will enjoy stability as rates gradually slip. That, in turn, will prompt corporations to swap short-term debt for equity and bonds. The elimination of short-term borrowings will increase cash flow, which will put further downward pressure on rates even as capital spending picks up. As the economy improves, so will the flow of federal revenues, and the deficit will narrow. No, we are not entering the Promised Land, but we do seem to be entering a period of relatively stable prosperity, which could well last throughout the 1980s. Before 1969 the corporate pretax rate of return was around 20%. By last year, it had fallen to less than half that level. What's Ahead thinks that long-term trend has finally reversed.

The Forbes Index





Lengthening the string. The FORBES Index has risen for the seventh time in a row. Contributing to the 1.6% gain was a decline in unemployment claims, which fell for the third consecutive month. In the latest reporting period, there were over 20% fewer claims than in December 1982.

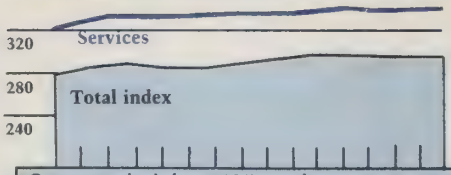
Good news also came from the inflation front, where reports of victories are becoming routine. The Consumer Price Index showed no gain at all, while the service sector index posted a scant 0.3% rise. Manufacturers' new orders were off 3.2% after jumping by 5.7% in January. Inventories are still being liquidated, having fallen 0.3%.

The best evidence that the recovery is for real, however, comes from consumer installment credit outstanding. This category, which includes automotive and revolving credit, mobile home loans and others, increased by 0.9%, compared with a 0.7% gain during the previous month.

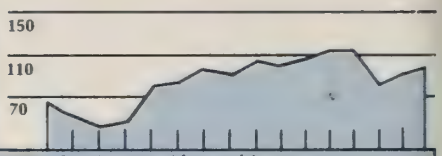
The Forbes Index Components

The FORBES Index is a measure of U.S. economic activity composed of eight equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, the level of new orders for durable goods compared with manufacturers' inventories, total retail sales, new housing starts, personal income, the change in the amount of consumer installment debt outstanding.

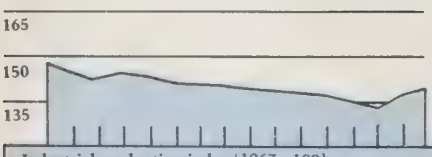
To measure these eight elements, FORBES monitors 11 series of U.S. government data. The last 14 months' data for each series are presented at right.



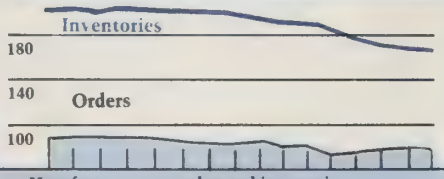
Consumer price indexes (1967=100) all urban consumers, unadjusted (Dept. of Labor)



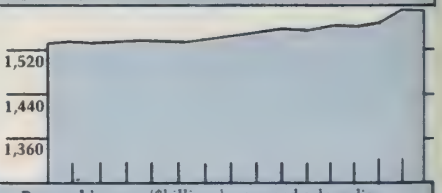
New housing starts (thousands) privately owned, unadjusted (Dept. of Commerce)



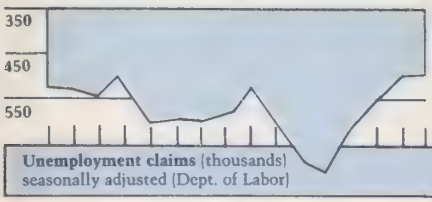
Industrial production index (1967=100) Seasonally adjusted (Federal Reserve)



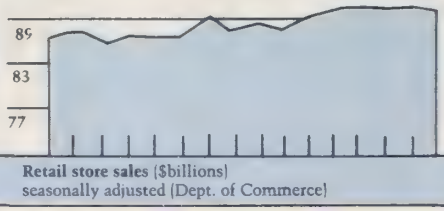
Manufacturers new orders and inventories ($billions) seasonally (Dept. of Commerce)



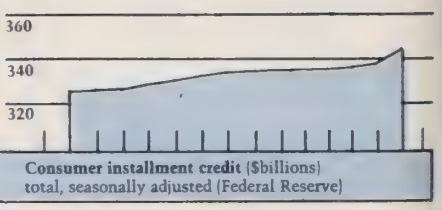
Personal income ($billions) wage and salary disbursements, seasonally adjusted (Dept. of Commerce)



Unemployment claims (thousands) seasonally adjusted (Dept. of Labor)



Retail store sales ($billions) seasonally adjusted (Dept. of Commerce)



Consumer installment credit ($billions) total, seasonally adjusted (Federal Reserve)

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OUR STATUS SYMBOL IS UNDER THE HOOD, NOT ON IT.

Cars and people have in common
very human tendency to celebrate
hat they do best.

So the exact nature and location
f these celebrations can be quite
evealing.

It's worth noting, then, that the
MW 733i is equipped with no
hrome ornaments or other such sac-
aments of self-congratulation.

It wears its priorities not on its
ood, but in places less apparent—
nd far more consequential.

PERFORMANCE FAR BEYOND THE SUPERFICIAL.

Beneath a thick shell of steel and
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echnological opposite of superficial.

It shuns big-bore V-8's in favor of
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very cubic centimeter is squeezed
r the ultimate output" (AutoWeek).

The squeezing is accomplished
ectronically. A system called Digital
Motor Electronics uses a micro-
rocessor to ensure that ignition
ccurs at the optimum moment for
otimum performance.

Another electronic system helps you drive with optimum efficiency. The 733i's analog fuel economy indicator reports back your actual mpg figures, so you can adjust accordingly.

Meanwhile, an onboard computer keeps tabs on such information as the distance remaining to your destination. And a Service Interval Indicator even calculates when routine service is needed.

(All the while, of course, BMW protects your investment—with a 3-year/36,000-mile limited warranty and a 6-year limited warranty against rust perforation.*)

This same preference for the substantive over the superficial distinguishes the passenger compartment. With orthopedically-designed leather bucket seats, an ergonomically engineered instrument panel, and virtually every other functional amenity imaginable.

These and other feats of engineering serve a purpose higher than enabling the car to delight in its own sophistication. The purpose is fun—the sort of pulse-quickening performance that, in the words of Car and Driver, "can take a limited amount of time and turn it into an experience to be savored for always."

A CONSPIRACY OF SCARCITY.

At $35,000 each, simple economics prevent the 733i from becoming a car for mass consumption.†

Its technological refinements have the same effect. As does the predictably time-consuming process of creating such a car—resulting in an output so limited that far less than one percent of all luxury cars offered in America this year will be 733i's.

All these factors conspire to severely limit supply—and, ironically, to ensure heavy demand. Last year, as in all previous years, there were more would-be 733i buyers than there were 733i's.

So if you're in the market for an elegant luxury sedan that performs, we suggest you act while there still is a market.

You can do so by visiting your nearest BMW dealer, who will be happy to arrange a test drive.

THE ULTIMATE DRIVING MACHINE.

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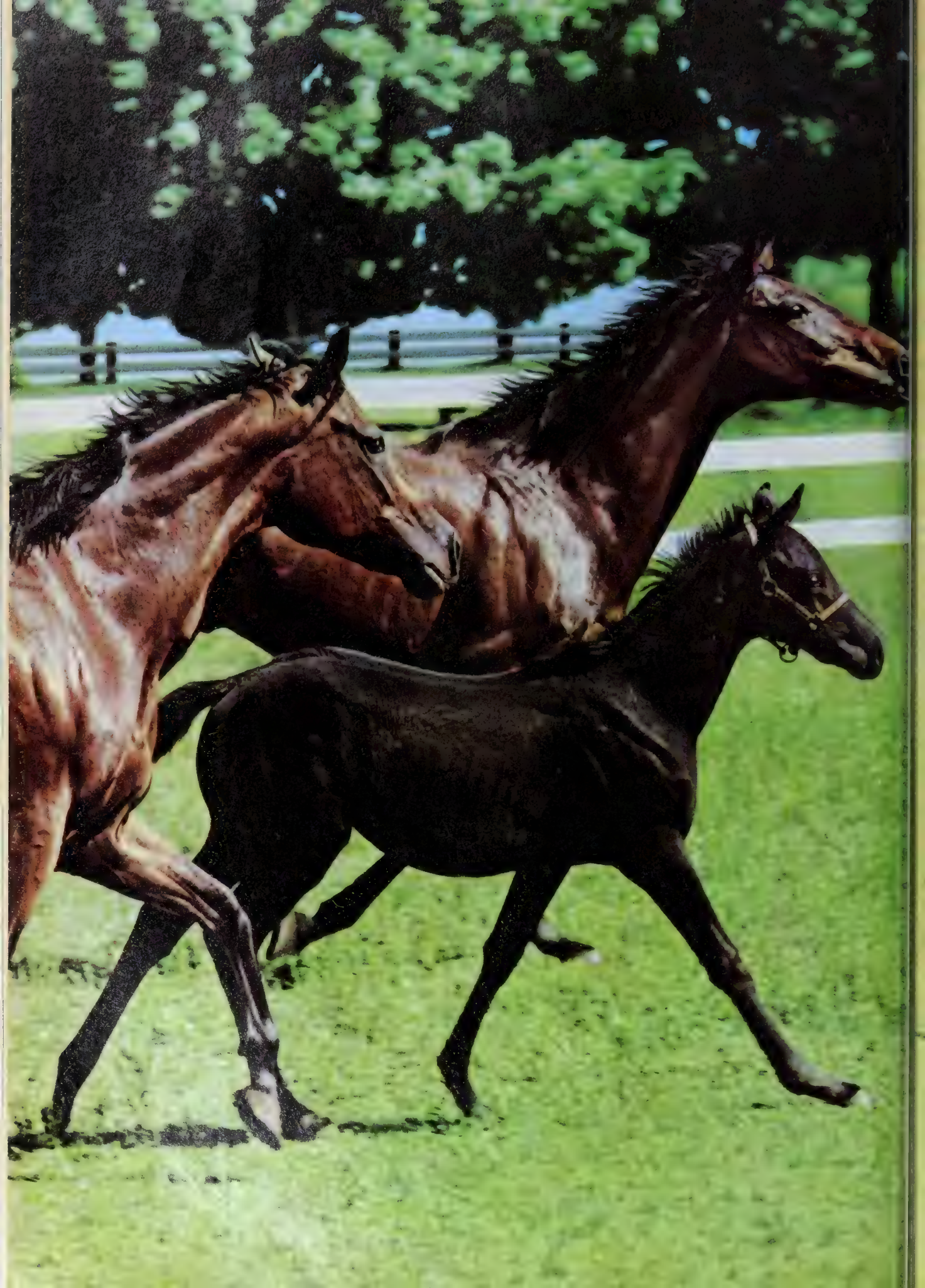

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The accountants audit and the investment bankers exercise due diligence, but frequently the public gets taken anyhow.

In whom do we trust?

By Richard L. Stern

ACCOUNTANTS CANNOT be the policemen of corporate America, says Norman Klein, managing partner of Denver-based Fox & Co., the nation's 12th-largest accounting firm. Does Klein sound defensive? Well he might. Fox & Co has been the independent auditor for O.P.M. Leasing, Saxon Industries and Flight Transportation, three of the biggest corporate scandals in recent years.

Klein says litigation prevents him from commenting about the three companies. So why this talk of policemen? Klein is trying to make a point. It is that corporate executives, if they truly want to, can find ways to hide things from the most comprehensive of audits. Maybe so, but the Securities & Exchange Commission apparently is not persuaded. Informed sources tell FORBES that the SEC is preparing an action against Fox and one or more former Fox employees.

If the auditor indeed has a police role to play, Fox, formerly Elmer Fox, Westheimer & Co., has played it badly, not only in one case but in several. When it is released, the O.P.M. report by trustee James Hassett, working with Washington attorneys Stephen Black and Arthur Mathews, promises to be one of the most closely detailed documents of modern corporate fraud since Equity Funding.

It likely will set off major arguments and much soul-searching about whether there is adequate protection for investors, and for moneylenders, in the current system of auditing by independent accounting firms. Not only are the auditors on trial. So are investment bankers, upon whose word both investors and lenders frequently make investing or lending decisions. In the O.P.M. bankruptcy and fraud, some distinguished names reportedly paid out some $75 million in a settlement with private placement lenders who suffered serious losses when O.P.M. went under. Among them: Lehman Brothers Kuhn Loeb; attorneys Singer Hutner Levine & Seeman; Rockwell International; and, of course, Fox & Co.

O.P.M. is a New York-based computer-leasing firm that collapsed under the weight of a $200 million fraud. The examiner's report is under lock and key. But papers already public in the case allege that former Fox partner Stephen Kutz was more than an innocent bystander. Price Waterhouse, hired to redo the O.P.M. books, contends that Kutz failed to conform with Financial Accounting Standards Board GAAP rules on booking computer sales leasebacks. That violation of accounting standards enabled a basically insolvent company to show paper profits. Contained among the piles of documents studied by the trustee is a memo from the law firm Singer Hutner on a meeting with Kutz, in which he explains how he would interpret accounting rules to produce $5 million in increased income and retained earnings for 1976.

O.P.M.'s Ponzi game has been detailed in great length in the financial press. It involved the leasing of computers such as IBM systems to corporations like Rockwell International and American Express. It was run by President Mordecai Weissman and Executive Vice President Myron Goodman, his brother-in-law, from a posh, modern, lower-Manhattan headquarters. Their desks in side-by-side offices were mounted on daises, the better to intimidate visitors. Presumably, in case he felt a bit tired from his business exertions, Weissman could retire to a queen-size bed that emerged from the lower drawer of a cabinet.

To raise cash to finance the computers and, as it turned out, their lifestyles, the partners engaged in sale and leaseback arrangements with investors who got the benefits of the tax credits. From March 1978 to September 1980 Lehman Brothers Kuhn Loeb arranged most of the debt financing for these deals. Lehman, according to the records, collected $2.5 million in fees from O.P.M.

Isn't all this accepted practice? Yes, but there was more to it. Unfortunately, many of the computers and leases existed only on paper. Inquiries mailed to the computer users at random by Fox—standard audit procedure—would have uncovered this. But according to testimony by Goodman, Fox allowed him to screen the confirmations first. Fox denies that.

O.P.M. showed losses through 1975 for every year since its founding in 1970. Indeed, financials for the year ending Nov. 30, 1975 show insolvency—a net worth deficit of $651,524 for Cali Trading International, the holding company for O.P.M. Who would trust money to an outfit like that?

That was where Kutz of Fox & Co came in. He turned red ink to black simply by booking in the first year all the lease income that would be paid over the life of the machines. Hence the $60,000 profit generated in a six year deal would be booked as income as soon as it was inked. This became known by the auditors and lawyers who recently redid the books as the "Kutz method."

The best that could be said for the Kutz method was that it was based on extremely optimistic assumptions. It

fact, the O.P.M. leases contained contingency clauses that allow users, after, say, the fourth year, to turn the computers back to O.P.M. for a variety of reasons, including outmoded equipment. In that case O.P.M. would assume the full cost of the remaining payments on the equipment. And, indeed, that happened with increasing frequency in the late 1970s.

The Fox-certified report for the period ending Dec. 31, 1976 shows O.P.M. with a positive net worth of $724,273. And things were going to get a lot better. Under the Kutz method, O.P.M. in 1977 showed net income of $1.3 million and retained earnings of $2.2 million. Restated by Price Waterhouse under GAAP standards, income becomes a loss of $9.4 million, and retained earnings turns into a deficit of $13.7 million. Similarly, "Kutz method" net income for 1978 is $1.7 million, compared with PW's restated $17.8 million loss. Kutz' retained earnings of $3.9 million becomes a net worth deficit of $31.5 million.

Other peculiar things were happening with the books. The balance sheets for the 13-month period ending Dec. 31, 1976 show an asset item of $9.7 million as a receivable from Dav-Na. Dav-Na? It was an affiliated partnership that served as a vehicle to reduce Weissman's and Goodman's personal income taxes and to drain cash from O.P.M. in the form of giant loans to Goodman and Weissman.

Fox prepared for the two partners, but never released, financial statements for Dav-Na, which show it was insolvent with a deficit net worth of $405,971 in 1976. But while Dav-Na was worse than broke, O.P.M.'s books for 1978 show an asset item of $9.7 million of receivables from Dav-Na. Attorney Mathews notes in an affidavit filed with the U.S. Bankruptcy Court in New York, "The [O.P.M.'s] 1980 financial statements do not account for or otherwise disclose that since February 1979 O.P.M.'s books and records reflected as assets over $100 million of fictitious and otherwise fraudulent leases with Rockwell International Corp. and other lessees."

O.P.M. Leasing's Goodman (left) *and Weissman*
Where were the "independent" certified public accountants?

While all this was going on, where were the "independent" certified public accountants?

In late October 1980 Kutz left Fox to form a partnership with Arthur Rogovin, a Fox partner on the Saxon account and a third Fox alumnus. One needn't be a detective to note certain similarities in the fraudulent bookkeeping involved in the two cases (FORBES, *May 24 and July 19, 1982*). Indeed, Rogovin is one of a number of Fox partners and former partners being sued by Saxon itself and bank creditors. In suing Fox, the bank creditors have charged that its audits of Saxon did not conform with GAAP. Saxon employees have testified about audits of the copier division, in which Fox officials neither personally checked the inventories nor entered the plant. The auditors denied that. Still, Saxon examiner attorney Arthur England in his report adds that employees called the audits "a joke."

Another Fox partner charged in Saxon suits was Morton Berger. Fox had established its presence in New York by acquiring his old firm, Westheimer, Fine, Berger & Co. A former member of that firm, Stanley Lurie, became chairman and chief executive officer of Saxon and was, according to testimony by Saxon employees, the chef in the cooking of Saxon's books.

It could be said that Fox & Co. simply had the bad luck to acquire Westheimer, Fine, Berger & Co. But this would not explain the situation with Flight Transportation, an air charter client handled by Fox' Minneapolis office. Flight Transportation received certification by Fox for its 1981 financials. According to SEC charges, revenues for the year were overstated by "at least $14 million," and cash and short-term investments by $2 million. But sworn affidavits by Flight employees testify that the company never handled the volume of charters that could have produced those revenues. More bad luck for Fox? Perhaps. Drexel Burnham Lambert, one of the lead investment bankers for a new Flight issue in early June of 1982, only two weeks before the company collapsed, has argued that it depended upon the certification from Fox & Co. Can they get off the hook simply by claiming to have been misled by auditors? Is it reasonable to assume that a due diligence study would have uncovered the fraud?

Similar questions arise for Lehman Brothers in the O.P.M. case. Lehman was sued by private placement lenders alleging it knew that O.P.M.'s financial problems were serious. Lehman has denied that, saying it, too,

depended upon the Fox & Co. audits as well as Goodman, Weissman and Singer Hutner.

But don't investment bankers, for the huge fees they get, have additional responsibility to verify the facts? The suits against Lehman charged that by late 1979 O.P.M. books and records were in great disarray. Indeed, at Lehman's urging, O.P.M. hired Coopers & Lybrand to redesign O.P.M.'s accounting and administrative procedures. For the first seven months of 1980 Lehman attended weekly meetings with Coopers. There is the fact that Lehman served both as a financial adviser and investment banker to O.P.M. There are other facts. Lehman knew O.P.M. was indicted and convicted by the federal government in the spring of 1980 for check kiting. Lehman contends that the lenders were sophisticated investors and the investors' concern was with the financial worthiness of computer lessees like Rockwell and American Express, not O.P.M.

By 1980, users had returned equipment on which O.P.M. had to assume the financing, and many O.P.M. checks were being returned for insufficient funds. Despite the problems, Lehman continued to arrange debt financing for O.P.M. through the summer of 1980. In total, it placed $390 million of permanent financing during the 30 months it worked for O.P.M. The following March O.P.M. collapsed. Due diligence?

What about the lawyers? According to other public records, O.P.M. attorneys Singer Hutner learned from Goodman of past fraudulent computer deals but, after getting assurances from Goodman that it would not happen again, continued to close new deals amounting to $70 million. Singer Hutner, in October 1980, after learning the fraud had continued, resigned from the account. The law firm had sought and received advice in June of 1980 from two outside counsels—one, Judge Joseph McLaughlin, dean of Fordham University Law School—that it could remain silent under the confidential attorney-client privilege relationship.

This is an area of great debate in the legal profession. What could Singer Hutner have done? One attorney suggests it could have notified past investors that they could no longer rely on Singer Hutner certifications on the deals. It could have notified the new attorney, who also has the attorney-client privilege. It could also have notified other board members, although, since they were also involved in the fraud, it would not have mattered in this case.

There is no evidence in these cases that outside accountants, investment bankers, lawyers and directors earned one penny through illegal rake-offs or other means. The common thread: Huge fees can undermine objectivity.

In the O.P.M. fraud, Goodman and Weissman, respectively, are serving sentences of 12 years and 10 years in jail. There may or may not be convictions in the Saxon and Flight Transportation cases, but the big questions remain unanswered: Who protects the public? Who protects the investment process upon which American prosperity ultimately depends? A few bad apples do not spoil the entire barrel. It is not entirely fair to discredit the U.S. system of independent auditing on the basis of a couple of sensational frauds. Nevertheless, the Fox situation highlights the dangers.

The current mess at Baldwin-United further shows some of the dangers. Why, under GAAP standards, could independent auditors certify paper profits that were so misleading to shareholders and bankers alike?

Norman Klein is wrong in saying accountants can't be policemen. Accountants, lawyers and investment bankers must serve two masters: the client and the public interest. That's what makes their jobs so tough. But that's what they get paid for. ■

You had better read that proxy statement. It may contain "shark repellent." This probably increases management's options, but may limit stockholders' options.

The boiler plate defense

By Priscilla S. Meyer

DON'T CALL THEM shark repellent clauses, call them shareholder protective amendments," says Richard Nye of Georgeson & Co., the proxy solicitation firm. He's talking about a raft of management proposals at this year's annual meetings, ostensibly motivated by managements' sense of fairness, equity and concern for widows and orphans. Such nobility has produced huge proxy filings that require careful scrutiny. Perhaps 15% to 20% of the corporations in The Forbes 500s are asking shareholders to vote for proposals that would make it tougher for acquirers to move in. Some of those proposals are less protective of shareholders than others. But nearly all of them are protective of management and its perks.

"The last five quarters were the most favorable ever for corporate raiders," says Martin Siegel of Kidder, Peabody in explaining the phenomenon. A Kidder study shows that the original raider succeeded in 24 of 32 unwanted, unnegotiated takeover tries. Most of the takeovers were, in proxy-fighter argot, "two-tier" deals, such as Martin Marietta's tender for Bendix. Martin Marietta offered $75 a share in cash for 50% of Bendix and hoped to buy the rest of Bendix for about $55 a share. Investment institutions and arbitragers usually gain most in the first tier of such deals. Individuals usually wind up second, or so the prevailing wisdom has it. In theory, then, discouraging such deals is protection for individual stockholders. But it may not always be so.

Martin Lipton, the takeover lawyer, advises corporate clients to push for staggered terms of office for directors and for so-called fair-price requirements. When directors' terms of office expire at varying times, it makes it tough for raiders—or justifiably unhappy shareholders, for that matter—to mount a quick contest for board control. Fair-price proposals require anyone buying some of the stock to pay at least an equal price for the rest.

Sounds as American as motherhood. But what about the shareholders who gain nothing at all simply because the fair-price requirement has discouraged a buyer from offering any premium for a company's shares?

Some companies, particularly those feeling the hot breath of potential raiders, are going beyond the advice of lawyers and investment bankers. In some cases they are even risking shareholder rejection for proposals, which is customarily shunned as a sign of management weakness.

Take Axia Inc., the former Bliss & Laughlin. Even T. Collinsworth Jr., chief executive of Axia, knows management is headed straight into the wind with its extensive antitakeover proposal. "If the vote doesn't carry, at least we know we've done our job as a management," he says.

Axia's management is proposing that a four-fifths vote of shares, a "supermajority," must approve any takeover by anyone first acquiring 30% or more of Axia's stock unless the acquirer makes a single bid for all the stock. And the 30%-plus stockholder wouldn't get to vote at all. If they pass, the proposals would make Axia almost takeover-proof, unless management wanted it taken over. Collinsworth realizes, however, that it may be too late. Victor Posner and another stockholder already have big chunks of Axia stock and are unlikely to vote those shares—some 26% of the outstanding and rising—in favor of their own freeze-out.

Axia CEO Even Collinsworth
Heading straight into the wind.

Data General went to its shareholders with a similar package including a supermajority provision, and lost. But Super Food Services of Dayton, Ohio had better luck in March. Super Food got through its supermajority proposal and an unusual "public interest" proposal that permits the board to consider factors other than price in a takeover bid.

In general, companies are flagging antitakeover proposals on the first page of proxy material. But Union Oil Co. of California proposes on its opening page a reorganization into a holding company that may make outside control difficult. Only deep in the proxy are the means revealed: a 75% supermajority rule invocable by any holder of more than 10% of the stock.

Supermajority proposals are the most controversial of the new "shark repellent" amendments, at least among investment institutions. According to Kidder, Peabody's study, institutions oppose supermajority 2-to-1, favor fair-price amendments 2-to-1 and split on staggered boards.

At worst, the supermajority requirement could permit directors to reject takeover offers that might actually be favored by the majority of holders, thus entrenching management until someone comes along with an any-and-all tender offer.

Staggered boards have existed for years, but they have become much more popular of late. Superior Oil staggered its board terms early this year, without a vote of shareholders. An apparent vagary of Nevada law made that possible. The appearance of T. Boone Pickens' Mesa Petroleum on Superior's list of shareholders made the change desirable, to Superior management, at least.

This year more than ever stockholders are well advised to struggle through the boiler plate before either throwing the proxy statement into the wastebasket or voting blindly for management across the board. ■

Varian Associates has been comfortable and academic, but not very profitable. Tom Sege is changing that.

"It's about time"

By Kathleen K. Wiegner

A PERENNIAL AUTUMN EVENT in the *Peanuts* comic strip is Charlie Brown believing Lucy's promise not to pull the football away this time, and falling flat on his back when she fools him again. Investors in Varian Associates, Inc. can be forgiven if they occasionally feel like Charlie Brown.

"Perennial promise, but perennial underperformance," admits President Thomas Sege, "have characterized Varian for a number of years." Sege, an 18-year Varian veteran, has spent the last two years trying to break the pattern at the Palo Alto, Calif.-based electron tube and instrument maker and thinks he sees the beginnings of success. For fiscal 1982 (ended Sept. 30) Varian reported record earnings of $26.5 million, compared with a net loss of $3.6 million in 1981. It did that on an 8% sales increase, to $691 million from $638 million. And for the first quarter of fiscal 1983, net from operations rose 55%, to $6.6 million, on a 3% sales gain.

The stock market has noticed. Varian recently sold at 44⅝, 26 times earnings. But keep an eye on that football. Varian Associates has been here before.

In the early 1960s Varian was a highflyer (109 times earnings) because its military business was booming. That business went bust in 1962, as did Varian's earnings. Management staged a comeback by emphasizing nonmilitary business and acquisitions. But by the late 1960s Varian

Varian President Tom Sege with a spectrometer for looking into atomic structures
A reputation for high technology, great creativity, but low profitability.

was in trouble again. So it brought in a new president who, after a loss in 1971, kept things rolling until 1981. That year Varian lost $3.6 million, and directors handed the turnaround job to Sege.

One of the few engineers at Varian without a Ph.D. ("But I'm a damned fine engineer"), Sege concluded that Varian's problems lay less with the company's products than with the rather academic way its resources had been managed.

The company, founded in 1948 by Russell and Sigurd Varian, brothers who were key figures in the development of radar, has long had ties with Stanford University and a reputation second only to Bell Laboratories as a place where first-rate technical talent felt right at home.

Too much at home. "The name Varian Associates is significant," observes Sege, "because it means a loose association of people doing their own thing. We had a number of small shops with small objectives." One company legend is of the Varian engineer who invented a printer capable of printing enough information to cover a football field. When asked who in the world would want such a printer, the inventor answered, "Lawrence Livermore Laboratory. They'll buy one of everything."

Varian has had plenty of opportunities. It acquired a minicomputer company in the late 1960s, and by 1970 Varian Data Machines had 10% of the growing minicomputer market, a greater share of business than Hewlett-Packard or Data General. But Varian managers never got the hang of competing in that fast-paced, rapidly changing market. New products did not leave the labs quickly enough, and high manufacturing costs finally sank the venture. It was sold to Sperry-Univac in 1977.

Varian was also an early leader in CT scanners, but quickly found that it was overmatched by giants like General Electric and Britain's EMI in a capital-intensive, highly competitive business. Varian got out of scanners in 1979.

What is this management doing to break such bad habits? Sege, 56, a Yugoslavian whose father got the family out of Europe just ahead of Hitler's advancing armies in 1940, has established tight controls over inventories and receivables and has tied incentive plans for the divisions to improved financial performance. Pretax margins and asset management are the criteria, rather than the old system that Sege describes as a gentlemanly "atta boy" approach. How have Varian's formerly pampered Ph.D.s taken to such change? Surprisingly well, says Sege. "There was an early perception that we were moving toward success. The attitude seemed to be 'it's about time.' " That is further confirmation, if such were needed, that people don't want to be pampered; they want to succeed.

With the people straightened out, Sege tackled the businesses, selling off or closing the many that were marginal or losing money. Varian's 7% five-year average return on equity is far below the 18% to 26% of such high-technology companies as Hewlett-Packard, Intel and AMP. He is out to correct that.

Varian's base is solid. Electron devices, derivatives of the Varian brothers' original Klystron tube invention, give it 47% of sales and almost 78% of pretax earnings. And it has good potential in semiconductor equipment (roughly $100 million sales but less than $5 million in pretax earnings in recession-hit 1982).

So with a strong hand to guide it, a business that was run like an undermanaged laboratory is starting to behave like a laboratory run as a business. Maybe Varian really will hold the football, this time. ■

Gulfstream Aerospace is the biggest new issue to come down the pike in a long time. It will make at least one person very happy.

Just like the good old days

By John R. Dorfman

AVIATION MAGNATE Allen Paulson has decided to cut the public in for 21% of Gulfstream Aerospace Corp. The initial offering, scheduled for early this month, seems likely to give the company a market value around $620 million. That's the biggest coming-to-market splash for an industrial firm since Hughes Tool Co. more than a decade ago.

Glamour abounds. Gulfstream's main product is the Gulfstream III, the nation's largest, fastest, most luxurious executive jet. The planes go for about $10.5 million "green" (before painting) and over $14 million fully customized. Cessna and Gates Learjet sell lower-priced models, so buying into Gulfstream gives the public a piece of a top-tier producer. Maestro, the sizzling noise, please.

Shearson/American Express, head of the underwriting syndicate, expects to get $17 to $20 per share for the 7 million shares being offered. That's a total of about $130 million. Paulson is keeping 25.7 million shares, a bit more than 76% of the total. Presto. He's worth about $475 million in newly issued paper, putting him in the top half of The Forbes Four Hundred. Certainly this new issue makes sense, for him.

An airline mechanic turned entrepreneur, Paulson created Gulfstream Aerospace through two acquisitions. No question: It was a brilliant business achievement. He bought Grumman's general aviation business in 1978 for $52 million. Then in 1981 he acquired Rockwell International's general aviation operations for a price industry sources put at $20 million. Does $52 million plus $20 million equal $620 million over a period of a few years? It sure does, in the new math of hot new issues.

Actually, Gulfstream raises only about $60 million in this deal. Most of the other $70 million or so goes into Paulson's pocket. That's because the 7 million-share offering consists of 3.75 million existing shares offered by Paulson and other present stockholders, while only 3.25 million new shares are being offered by the company. Total shares outstanding will increase from about 30 million to 33 million, a 10% dilution.

What will Gulfstream do with its $60 million? Well, the company has $38 million in taxes to pay for 1982. It owes Britain's Rolls-Royce Ltd. about $6.6 million for some engines. And it has its eye on a new $2.8 million computer. Seems like most of the money's already spent. A good deal of the rest might go to pay down some bank loans. After all, Gulfstream owes $69 million, mostly at half a point above prime.

If the use of the proceeds sounds mundane, there's always the potential of the executive jet business. But a prospectus and a cold shower bring this down to earth. During 1982, the company got 15 orders for Gulfstream IIIs, vs. 32 in 1981. Still, 1982 earnings were an impressive $43 million on sales of $582 million. That's because of the lengthy lag between orders and deliveries—which means 1984 could turn out to be a poor year. After all, profits then will come out of 1982's weak order book. Recovery for the whole executive jet industry "is going to be very slow in building momentum," says Steven Slawson, a Bear, Stearns analyst. Other analysts and industry subcontractors agree.

Then there's the problem of subsidized competition. The U.S. executive jet market amounts to only about $2 billion annually, and last year 43% of the planes sold here came from places like France, Israel, Britain, Canada and Brazil. In its segment, Gulfstream has two competitors—Canadair, with its Challenger jet, and Avions Marcel Dassault, with its Falcon 50. These planes may not have quite the range or the speed of the Gulfstream III. But their makers have government backing, which gives them a leg up in the marketplace. In 1982 Dassault delivered 48 of its Falcon 50s, while Gulfstream delivered 36 Gulfstream IIIs.

A Gulfstream III in flight
51,000 feet up; stock price to match.

Would-be investors might want to keep all this in mind before they pay 14 times peak earnings and 8 times 1982 book value for Gulfstream shares. But then, why bother? Everyone knows that fun and excitement are the name of the game in first-time public offerings. Isn't there anyone left who remembers what happened to the overheated new issues market of 1969-70? ■

You have a jar of pennies just sitting there doing nothing? You could pitch them Cytoscan's way. The question is, will the company's shares rise another tenfold?

Cyto what?

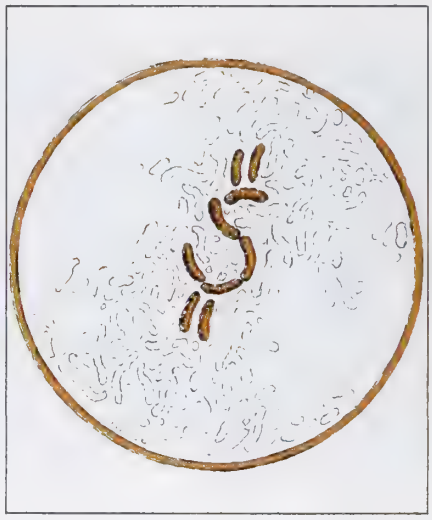
By Barbara Ettorre

On Jan. 28 Dr. Charles B. Root bought a whole lot of stock, 126 million shares to be precise, in Cytoscan, Inc., of which he is president, chief financial officer and director. He paid $12,600, or 1/100 of a cent a share, for it. He would now like it very much if you were to buy Cytoscan for a whole penny a share. Who wouldn't, under the circumstances? That would make the holdings of Dr. Root, a chemist, worth $1.26 million. Incidentally, on the same day, Cytoscan issued warrants to purchase 4 million shares of its common stock to a Cytoscan director, Dr. Christopher P. Kelly. Dr. Kelly exercised those warrants a month later, paying $4,000 for the 4 million shares. (The price had gone up to 1/10 of a cent a share, however.)

So you have never heard of Cytoscan? Not to worry. If the company has anything to say about that, its yet-to-be-developed technology (an automated chromosome-scanning system) will place it at the top of the biotechnology heap. Thanks to our old friends Brooks, Hamburger, Satnick Inc., the leading-edge Wall Street underwriters who brought you Techniclone (Forbes, *Mar. 14, 1983*) at 1 cent a share, Cytoscan will go public soon. Techniclone, by the way, has risen to around 6 cents a share, which proves something.

Cytoscan, incorporated in January, plans to sell 44 million shares at a cent a unit. (A unit is one share of common stock and one warrant to purchase a share of common within one year.) Cytoscan's prospectus won't be ready until the end of this month, says Brooks, Hamburger. But a perusal of the registration statement now at the Securities & Exchange Commission makes for interesting reading.

To begin, Cytoscan's line of business, the automated chromosome-scanning system, isn't off the drawing board yet. In fact the company has yet to create a laboratory. Of the net pro-



ceeds of $340,000 from the offering (after deducting $40,000 in underwriter's commissions and another $20,000 in expense allowances), the company plans to devote $190,000 to developing the system, establishing the testing lab and marketing the services. These are only first-year expenses. Another $75,000 allotted as reserve for contingencies may go toward any of these areas. Add another $20,000 for administrative expenses (leases, utilities, etc.) and $55,000 for legal, filing, transfer agents' and accounting fees, and there's the $340,000.

There's a hitch, however. While there is renewed interest in this kind of automated testing (to speed up amniocentesis and blood scans, for example), the basic computerized technique was developed back in the mid-to-late 1960s by several experts, including Dr. Robert Ledley, professor of physiology and biophysics at Georgetown University and a developer of the CT scan. The technology is expensive: more than $50,000 for sophisticated instruments and software and another $50,000 in related apparatus for one laboratory alone. If Cytoscan can develop inexpensive methods for its centralized lab and attract customers nationwide, then it might have something.

At the moment, Cytoscan has eight holders of its 364 million shares of common. Molecular Systems, Inc., a biotech operation headed by Dr. Kelly, owns some 162 million shares, or 44.5%. Kelly, 35, who has a doctor of pharmacy degree from the University of Southern California, is also CEO of American Diagnostics Corp., a $3 million (sales) outfit in Newport Beach, Calif. (home also of Cytoscan) that makes medical diagnostic kits for hospitals and clinical labs.

Dr. Root, 40, who holds a Ph.D. in physical chemistry from Catholic University of America, owns 34.6% (those 126 million shares). Ronald C. Peck, also 40, owns 11% (40 million shares), for which he paid $4,000. Peck, who had been with Schumadzu (an overseas manufacturer of imaging equipment) and Omnimedical (a provider of CT scans and other diagnostic services), will handle marketing for Cytoscan.

In addition to Kelly, the directors of Cytoscan are Carl Frederick Weggel, 39, senior magnet designer at INESCO, a company active in fusion energy, and Ronald H. Coelyn, 37, president of American Diagnostics. Weggel owns 20 million shares of Cytoscan, for which he paid $2,000.

As of Jan. 31, Cytoscan had spent $1,484 on research and development. None of the company's officers or directors, according to the registration statement, has received remuneration so far. After the closing of the offering at the end of the month, Root will receive $5,000 per month for the ensuing 12 months, plus a percentage of any net revenues from testing devices (5% of the first $500,000 in annual sales, 4% of the next $500,000, and so on down to 1%). Of course, Cytoscan has yet to sell a thing. Except stock. ■

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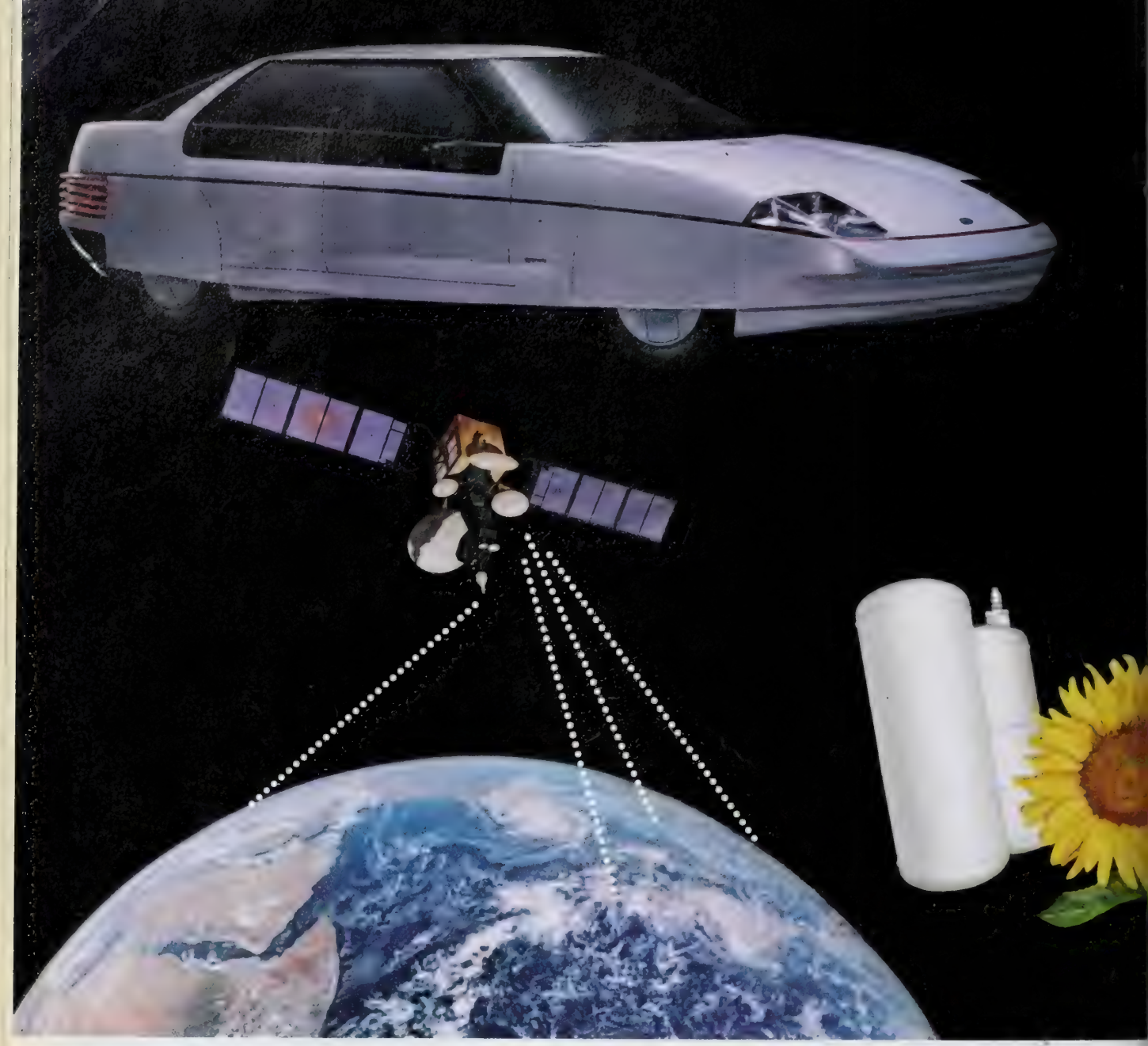

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Parachutes

If you're worried about the risk in airline stocks, almost all of which are up 50% or more since a year ago, Paul Berkman of Oppenheimer & Co. has a solution: Play their convertibles. The downside protection of fixed income can support the prices. The current yields are good, and the premiums are both reasonable and recoverable within a relatively short time. Berkman's most interesting pick is Trans World Corp.'s $2.66 Series C preferred. Its 3 million shares sell for 39, a 10% premium to common. The yield is about 7%, vs. no dividend for the common, so you can recoup the premium in 18 months on the dividend. Plus there's a kicker. Odyssey Partners, a New York-based investment group run by the former managing partners of Oppenheimer, is trying to force a breakup of Trans World. Odyssey claims the company is worth about $70 a share, which could be realized by mid-1984. "If their scenario comes true," says Berkman, "by then the preferred holder would have recouped the premium from his yield and doubled his money. And if it didn't, at least he'd be getting some income while he waited. That's the kind of risk-reward ratio I like." Other convertibles Berkman likes are Piedmont 11s due in 2007, Frontier 10s of 2007 and AMR $2.125 preferred.—**Thomas Jaffe**

A ride on the Reading

Lots of money has been made over the years in the bonds and sometimes the stocks of bankrupt railroads. The game goes on. The old Reading Railroad is emerging as an interesting asset play. The new Reading Co., long since bereft of its rails, sits on 13 acres of land in downtown Philadelphia, including some property on which the city's new convention center might be built.

Philadelphia's Reading Ter
An interesting asset play

This summer Philadelphia's mayor and city council will decide where to build the center. Outside consultants have recommended the Reading site. The 13 acres aren't all the Reading owns. There are big tax-loss carryforwards and the assets from Reading's ill-timed acquisition in 1981 of Imperial Cleveit's, an automotive division of Gould. The acquisition is currently in the red but is far from worthless.

What's the whole package worth? Prudential-Bache's Jack Kneafsey estimates that the real asset value of the company is around $58 a share. The stock sold as high as 26 last year but is now down to 18. There are 2.7 million shares outstanding listed on the Philadelphia Stock Exchange, but the stock is closely held by four top officers, and the float is only about 500,000 shares. Which perhaps explains why the stock has attracted so little attention. This also suggests that anyone who wants to buy the stock should be careful not to reach but should put a strict limit price on any buy orders.—**Barbara Rudolph**

Of time and timing

Ben Heineman's timing looks a bit off. In March he sold close to 250,000 shares of his Northwest Industries for $35 a share. This followed the sale of a similar-size block at around $39 last August. Poor Heineman. He's selling at a time when Northwest's stock is badly depressed, in main part because of what the oil drilling slump has done to the conglomerate's huge Texas steel-pipe business. Had he liquidated his holdings 13 or 14 months ago, he could have realized $75 a share or better—about double. That would have made him nearly $20 million richer. But don't jump to the conclusion that Heineman is throwing in the towel on the company he nursed from being a near-broke railroad to one of the nation's better conglomerates. "I'm being pushed by the ravages of time," he told Streetwalker. Now 69, Heineman plans to retire at 70. "These two stock sales were to pay off bank debts and to plan my estate." Should other investors follow Heineman's example? A number of contrarians think otherwise, arguing that Northwest is an excellent buy at the current price of 34. It is selling at only

Ben Heineman of Northwest Industries
Not throwing in the towel.

10 times depressed earnings estimates for 1983 and yielding 8% on a fairly well protected dividend. Moreover, the stock has strong recovery potential when the oil business picks up. Heineman agrees. He points out he's hanging on to a remaining 150,000 shares and adds: "If I were two or three years younger I wouldn't have sold any."—**T.J.**

Oil isn't perfume

On Wall Street, where picturesque terms flourish, "shark repellent" is used to describe what companies do to make themselves unattractive to takeover *(see p. 40)*. Law firms, brokerage houses, proxy solicitors and publicity outfits reap millions selling the stuff, but we doubt if anyone can improve on the spray that the $250 million Madison Fund recently saturated itself with. There Madison was, pure shark bait, after the proposed merger with Warner Communications fell through. What predator could resist making a pass at a company whose assets were half cash, half easily marketable securities? Then, management announced it was planning to spend up to $100 million of its cash to buy oil and gas ventures. A couple of years ago that might have sent the stock through the roof. But the way investors think about oil and gas nowadays, that news plus an oversubscribed tender offer sent Madison stock on a plunge. It dropped 20%. But does management really intend to buy all those oil and gas properties? Thomas Herzfeld, the South Miami fund expert, has his doubts. "Don't be surprised if they change their minds," he says. At a recent $17.25, Madison's shares were at a 28% discount from net asset value. And remember, 50% of those assets are cash. Herzfeld calls the stock a buy.—**T.J.**

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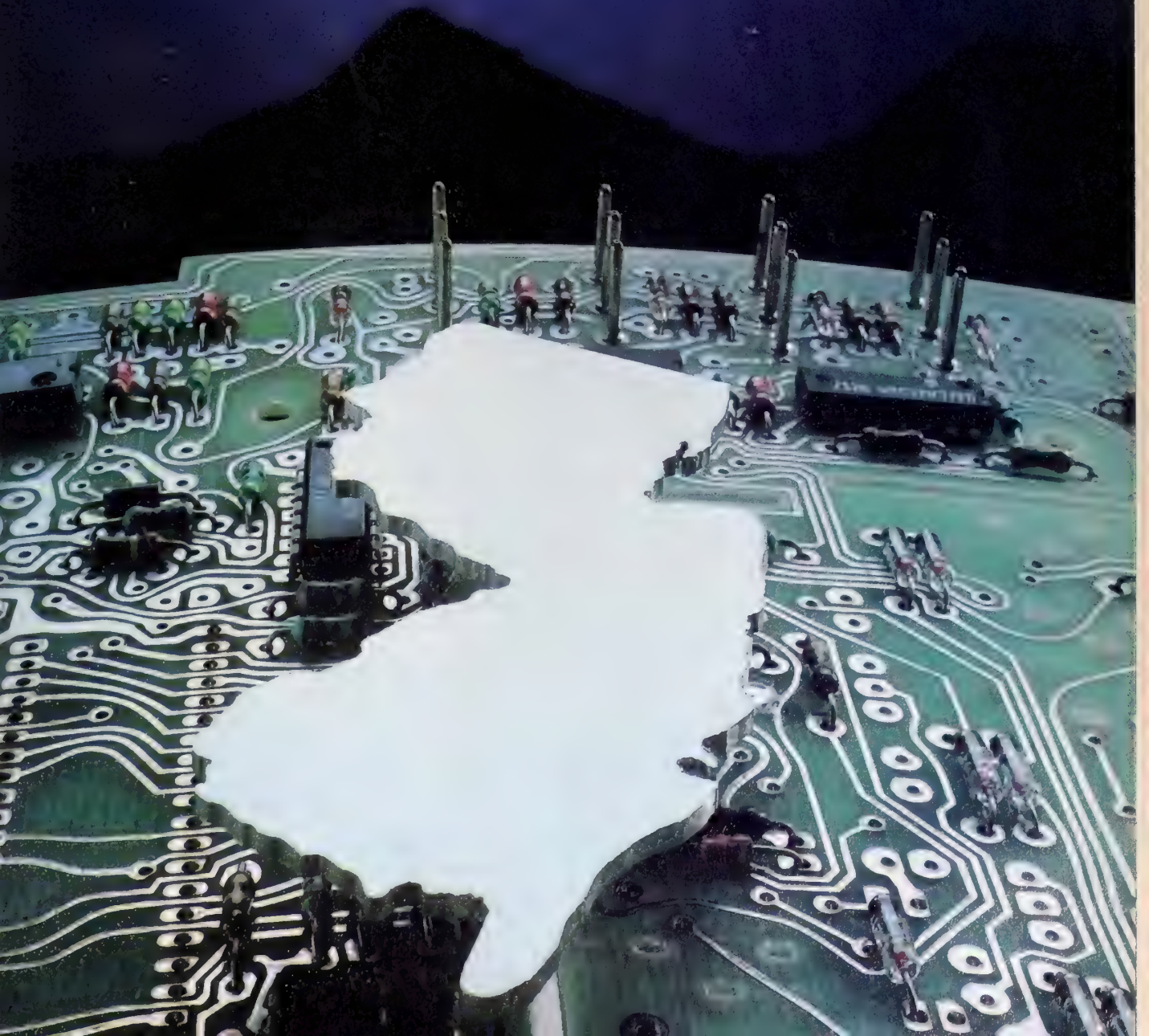

Beneath the banner of an outspoken Pope, Catholic social critics are on the march. Capitalism looks like the enemy.

How many divisions do they have?

By Michael Cieply

To put it mildly, Pope John Paul II's economics are eclectic. He showed undeniable courage and, most would agree, sound judgment recently in bawling out the Marxist clique that has taken over in Nicaragua. But, on the other hand, he is anything but a cheerleader for capitalism. In fact, he seems from many of his statements to be a serious opponent of it.

Recall and consider his 1979 homily at New York's Yankee Stadium, in which he lambasted much of U.S. society for a "frenzy of consumerism" that "conspires to give full reign to the instincts of self-interest, sex and power." Then there was his stern address that year at Puebla, Mexico, where he preached of a "social mortgage" on all private property. Both speeches were in line with one of John Paul II's most important statements of church policy, the 1981 encyclical *Laborem Exercens,* On Human Work. There he stated unequivocally "A principle that has always been taught by the Church: the principle of the priority of labor over capital."

The encyclical has already encouraged the Brazilian clergy's support of trade union radicalism, and, more recently, the Canadian Catholic bishops' bitter attack on Canada's economic retrenchment policies.

The same encyclical will inform the U.S. Catholic bishops' statement on American business that is now in preparation. Nobody thinks the bishops intend to praise capitalism.

From sermonizing prelates, making up in presumption what they lack in knowledge of economic affairs, O, Lord, deliver us. Intelligent business people are right to be annoyed at much of the current preaching about profits and business. Still, it is hard to dismiss the ideas of this Pope. He has attained the stature of a charismatic world leader for people who may never enter a church, synagogue or mosque. His words carry weight far beyond the numbers of his flock—51 million Catholics in the U.S., 784 million worldwide. The Pope refers at one point to proposals by the "highest Magisterium of the Church" for sharing by the workers in the management and/or profits of business. Fine words. But what does he mean?

Notre Dame University's Charles Wilber
Planning the moral economy.

What, specifically, he may mean is left to interpretation. Encyclicals—which are written in a language best described as Church Diplomatic—lay down general principles. They make no specific suggestions. So, for translation and elucidation, Forbes turned to Charles Wilber, the chairman of the economics department at Notre Dame University. Wilber, who has written extensively on Third World development, will advise the Catholic bishops on their proposed statement on capitalism (a corollary to their 1980 statement on communism). He is co-author, with Kenneth Jameson, of a book to be published in June by the University of Notre Dame Press, entitled *An Inquiry into the Poverty of Economics.*

We asked Wilber why the Catholic Church, and indeed religious people of many faiths, were finding fault with business lately. After declaring that he did not presume to speak for the entire Catholic Church, to say nothing of other religions, he told us Forbes' sense of history was artificial. "In the modern world there have been two economic systems that the Church has spoken about. One has been communism, and that has been condemned out of hand. The other is capitalism, and that has not been condemned. But its abuses have been pointed out consistently. So that Pope Leo XIII, writing in the 19th century, said that total free-market capitalism is destructive of human society. And that, while preserving the sanctity of private property, the people need to intervene in the economy to correct abuses. Leo XIII's encyclical *Rerum Novarum* encouraged the formation of labor unions. Later it was stated that 'The Church must take a preferential option for the poor.' "

But how does the Church deal with this undeniable fact: Capitalism—not laissez-faire, textbook capitalism, but the modern, evolved, decentralized economic system—has brought a better standard of living to a broader mass of people than ever in history. It has done this not by *diktat* or five-year plan but by trusting individuals to make rational economic decisions, by trusting the marketplace rather than legislative goodwill.

Wilber replies that the Church can't accept pure laissez-faire. "The Church's point would be that the economy must exist for people's welfare," he says. "And the economic system cannot be disentangled from ethical concerns. The Church would say that the people left behind in Detroit should not have to bear the cost by themselves of economic change;

5

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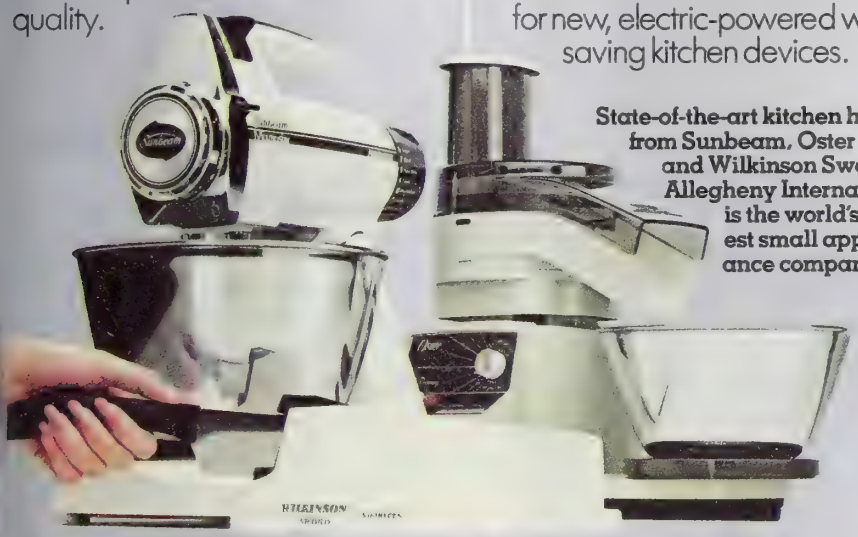

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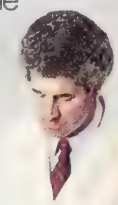

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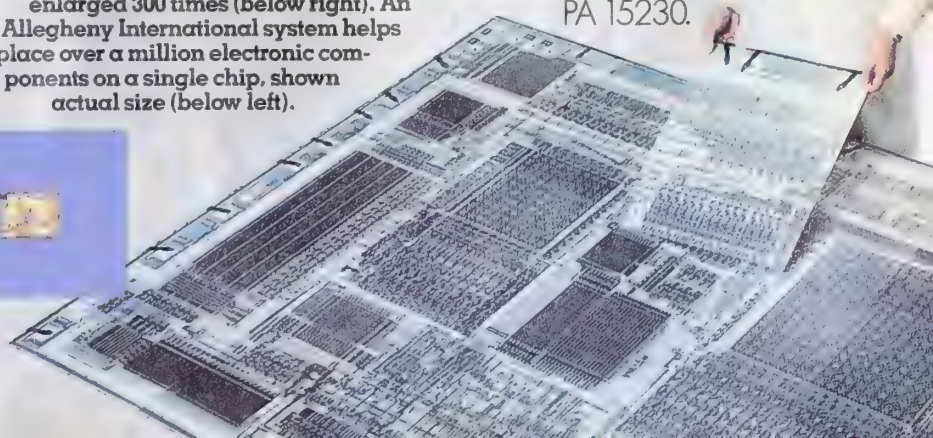

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As I See It

that it is unjust to leave those people without jobs, without hope, with broken families."

And the Church's demand would be not for extended unemployment insurance or an increase in welfare, but for jobs, jobs for all. The Church's viewpoint on work, as expressed in *Laborem Exercens*, approaches the mystical: "Work is a good thing for man because through work man not only transforms nature, adapting it to his own needs, but he also achieves fulfillment as a human being and indeed . . . man shares by his work in the activity of the Creator." Thus, it follows that unemployment—the lack of opportunity for man to achieve fulfillment, to share in the activity of the Creator—is, in the words of the encyclical, "in all cases an evil." A practicing capitalist could easily concur in that sentiment, but now comes the problem: The Church goes on to

The Church's demand would be not for extended unemployment insurance or an increase in welfare, but for jobs for all. Unemployment, says* Laborem Exercens, *"is in all cases an evil."

demand that "those persons and institutions which determine the socioeconomic system" make provision for "overall planning" in order to ensure that work is provided. In other words, don't trust the market.

Wilber concedes that full employment is difficult to achieve without inflation. The only solutions to the problem that he can see, though, are central government control over wages and prices and a federal job referral service. When visitors from FORBES groan that he is proposing another statist solution to the employment problem, he protests.

"I see nothing incompatible with strengthening the federal government and strengthening, at exactly the same time, small business and local governments," he says. "You find this in every Catholic encyclical: If the individual can do it, then the individual should do it."

Wilber would have the federal government establish every year a level of aggregate spending that will yield full employment. This he sees as a stimulus to investment and economic activity. But Washington's so-called "full employment budgets" have for

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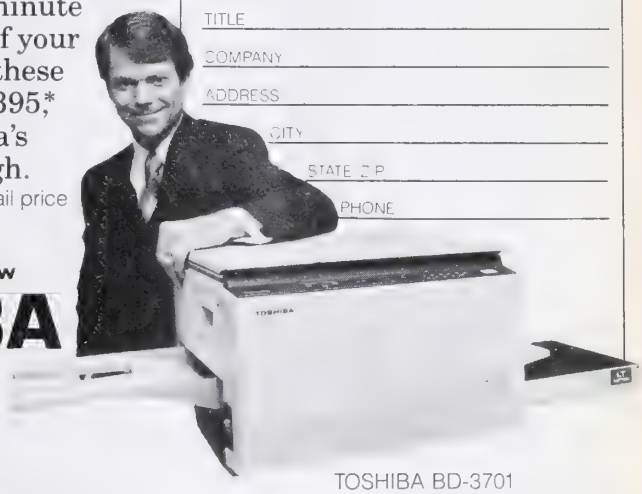

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"NOW THAT'S WHAT I CALL A DOUBLE EAGLE."

TOM WATSON, golf professional

years yielded only mounting deficits. Wilber also argues for small-business counterweights to big business, as if small units are not already attracting more fresh capital than yesteryear's big corporations. In many ways, Wilber's view of the current economic landscape is like that of the encyclical. It seems out of date, out of touch with a rapidly changing world. This stems, to be fair, not from errant ideology but from the fact that the principal concern of religion is not economics but morality. Wilber's perspective on Adam Smith sums it up.

Wilber: Adam Smith's assumption was that a simple system of natural liberty would yield the common good. He gave two reasons for that. Economists only talk about one—that is, competition. But Smith stressed just as heavily that people will compete only within some given moral law. That they won't lie, steal, cheat, and so on. Now, because Smith was at the very beginning—I mean, the largest factory in England in 1776 had 20 employees—I don't think he understood how that law would erode.

Personal morality has eroded?

Wilber: That's tricky, because people have been sinful in all ages. My concern is not with personal morality. My concern is with the way structures in society lead people who are doing right to end up with bad results. My argument is that today in our economy we need new structures to keep the poor, the weak from being hurt. There is incredible suffering in our society. I will argue to the end with anyone who says there's not.

Peace! Who would argue with justice or concern for the poor? But some well-intentioned Church pronouncements seem dangerously naive. To take just one instance, the Canadian bishops, in their pastoral letter, blame the "new technology" and a dominance of machines over people for moral disorder in the world economy. They condemn investment in pipelines and hydroelectric projects, and call for reinforcement of labor-intensive industries like textiles. As an economist, what can you make of that?

Wilber: Church documents need to be very careful about specifically addressing things like textile industries or investment in hydroelectric power plants, because those boil down to empirical questions about which the Church has no special competence. The Canadian bishops are writing out of what I can only interpret as a colonial context. There are lots of reverberations with the Latin American bishops' statements. They've made statements that may be very wrong.

Yet even John Paul seems uncomfortable with business. In Laborem Exercens *he castigates firms that "fix the highest possible prices for their products, while trying at the same time to fix the lowest prices for raw materials or semimanufactured goods." Does the Church balk at the very notion of a market economy?*

Wilber: To a degree, I would have to say, yes. Markets are based on the idea, to put it in value terms, of selfishness. People are moved to do things by appealing to their self-interest, and that on its face makes a Christian uneasy. Now, I'm certainly not antimarket, and I don't think the Church is either. It's only when the market principle becomes the organizing principle of all social life that the Church draws the line.

"Hit with falling demand for your products, you've got to lay off workers. You can't help that. But the system that allows that to occur all the time is unjust. And that's where the nut of the argument is."

Let me give you my thesis, drawn from some work done years ago by Karl Polanyi, called *The Great Transformation*. The "great transformation" was the rise of the market economy in the 18th and 19th centuries. For the first time in history, economic decisions were made for economic reasons. Land shall be used for the most profitable occupation. Not for the use that was inherited, or dictated by the Church, or whatever.

But the moment that happened, nobody liked it. Nobody would accept the dictates of the market about his own life. Immediately, child labor laws were passed. Businesses began to merge and fix prices. Workers organized unions. So the natural movement of history is to re-embed that economy in the social system. While we all say we love the market and competition, we don't. We do everything in our power to defeat it.

We hear John Paul talk of things like "just remuneration" and man's "appropriate place in the vast and socially differentiated world of work." Isn't that a feudal world view? A pre-Great Transformation world?

Wilber: That interpretation might have fit the Church in the past. The idea that people are parts of an organism— the head, the hands, all of that. But today I think the Church is wrestling with a terribly important problem. That is: How can you have a class society that is just? Accepting that we'll always have the rich and the poor, how can an assembly-line worker be as dignified and as important as the president of General Motors?

Some would argue that economic growth brings equality for all.

Wilber: That's up for debate. But I think most Catholic thought leans toward the belief that we won't be able to rely solely on growth to solve our problems. That's one great virtue of growth. It postpones conflict among the sharers. But I think there's a growing belief that we can no longer avoid dealing with issues of fairness.

We reminded Wilber that business people are tired of being accused of unfairness and we asked him if U.S. capitalism is fundamentally at odds with Church teaching. His reply was that the Church is not accusing individuals of unfairness, but . . .

Wilber: The Church argument is that there are structures that, regardless of how nice you are, result in injustice being committed. I have found in seminars over five years with vice presidents of multinational corporations such as Ralston Purina, Caterpillar, Castle & Cooke, you name it, the businessman would say, "My God, I pay fair wages. I do everything in my power to take care of my employees. I obey all the laws." And our response would be that market structures can result in injustice. For instance, you as the business executive are hit with falling demand for your products. You've got to lay off workers to survive. You can't help that. But the system that allows that to occur all the time is unjust. And that's where the nut of the argument is.

Is there any resolution of the argument? Not really, because capitalism produces the greatest good for the greatest number but penalizes a lot of unfortunate individuals. There are plenty of jobs for computer operators, but autoworkers lose their homes. The demand for skilled workers exceeds the supply, but the unskilled are condemned to idleness and uselessness. Capitalism is an efficient society. It is not always a kind society.

So the churches should go to it. Only they should not lose sight of the great goods of capitalism while they worry about and debate its probably inevitable cruelties. ■

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Would you believe an impending labor shortage in the U.S.? Despite today's high rate of unemployment, economist Lawrence Olson says we could have one.

Help wanted

By Jean A. Briggs and James Cook

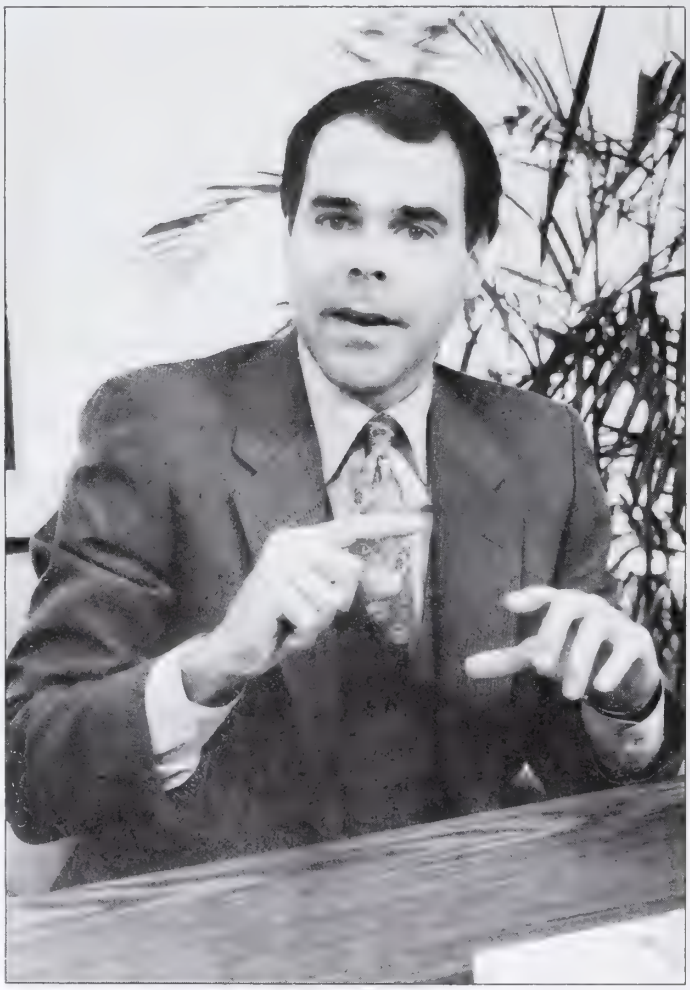
WITH 11.4 MILLION people unemployed, the notion that a labor shortage is impending seems off the wall. Yet that's just what labor economist Lawrence Olson is predicting. Recently, FORBES visited Olson in the Washington office of his consulting firm, Sage Associates.

You are expecting a labor shortage in three to five years?

Olson: That's right. There are three reasons for it. First, there will be a very marked slowdown in the rate of increase in the labor force. We've had huge annual influxes over the last 15 years—the baby boomers, women, soldiers returning from Vietnam. During the last half of this decade the growth rate will be about half what it was in the 1970s—1.3%, vs. 2.6%. That's a huge change.

Second, there is investment. In the 1970s we had relatively slow investment. With the new incentives built into the tax system there should be much more investment in the 1980s. Also, quite a few of the technologies that were in their infancy or their adolescence in the 1970s are now ready for full exploitation—such as microprocessing, fiber optics, lasers, satellite communications.

Third is the growing awareness that we have to compete in world markets. This is a "let's get off our backside" kind of force. If we compete well in the world marketplace, then we will generate millions of new jobs.



Sage Associates' Laurence Olson
"The labor market is about to be turned on its head."

The shortage, then, is inevitable?

Olson: Absolutely not. If we don't keep our competitive edge, then this is a nonissue. It's critical that we compete internationally, and that means at home in the biggest and richest market of all, as well as overseas where the high growth is.

Even a possible shortage is not what other people are forecasting.

Olson: There is a large psychological content in the current recession. We've lost faith in ourselves. We got beat a couple of times by the Japanese and now we worry about the productive value of the American worker. I have no real doubt we can do it. We need to go out and compete.

You're talking about big changes in the economy.

Olson: We have an example. The Japanese have gone through what we're about to go through. The rate of growth of their labor force turned down in the mid-Sixties. What they did was to redeploy their entire economy in order to leverage their human resources. They went after knowledge-intensive industries. They let their competitive advantage in some traditional industries slip away because they were labor-intensive. They didn't bring in huge numbers of guest workers as the Germans did. They leveraged their workers and up went their average earnings. And up went their skill. It's critically important that we do the same kind of thing.

Why wouldn't we?

Olson: The danger is that we will hesitate, that we will hunker down. That business managers will be cautious. That people will try to find ways of protecting their jobs by throwing up trade restrictions—the domestic content bill is an obvious example. That we will fall into make

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work job programs that don't really create anything. It would be much more productive for workers who can't find employment to retrain.

The Administration said recently that 6% was the normal unemployment rate in America today.
Olson: The difficulty with such projections is they skew people's thoughts to the wrong sorts of problems. Many companies are now busily early-retiring workers at huge costs. The lump sum payments required are enormous. In many cases these are very productive workers who in just a few years' time will be needed.

As people begin to realize that unemployment is thawing it will become clear that the sorts of things we should have been doing were different from the things we were doing. Instead of trying to find ways to scurry away the unemployed, we should be encouraging mobility and encouraging retraining of people.

Isn't that easier said than done?
Olson: Absolutely. But we are making some progress. The junior colleges and the community colleges are helping people who don't have good jobs to learn skills and find good jobs. They are also helping companies retrain their employees. Basically, the entire work force has to be retrained. I'm optimistic because the U.S. work force is an educated, flexible group.

But one of the problems of the unemployed is that they are not or cannot be flexible.
Olson: That's true, but the overall group is. The unemployed are probably the least flexible people. They may have the desire to move, but they don't have the skills.

You're not concerned about technological unemployment—what happens to bank tellers, for example, when they're replaced by automatic tellers?
Olson: Two points. The most important is it depends upon our international competitiveness. If we can compete internationally then there are many other markets; the workers who design the automatic tellers will have much higher wages than the tellers did and they will spend these to a large extent on services creating more service jobs. More productivity in one area generates more demand in another area as long as we continue to compete. There is no historical precedent for increases in productivity leading to decreases in overall employment. In a worldwide competitive situation, the quickest way to raise unemployment over the long haul is to fail to redeploy resources in the surge of new technology.

If a shortage does develop, how and when will we begin to see it?
Olson: Shortage, of course, is a transitory thing in any market. The most important thing that leads to it is the element of surprise. There are few things more easily predictable than the age structure of the population; the age structure of the labor force is just a short hop behind. Yet we're going along a path we've gone along for 15 years. Our whole industry structure, our whole educational structure is by now adapted to this well-known phenomenon of a huge army of young people coming into the labor force every year.

It was an unusual period, but 15 years is a long time; by now business managers are used to it, to not having to worry about losses of workers because there were always more workers ready to take the jobs. Large turnover, if anything, has been beneficial. It helped companies lower their salary structure. All these attitudes have been underlined, ratified, by the current recession. So we think the future will be the same.

But the labor market is about to be turned on its head. We should see the signs before 1985. We're moving from a labor-surplus but not challenged economy into an internationally challenged labor-short economy, so it becomes important to learn how to use labor productively, efficiently and cheaply. The danger is that we will take today's high unemployment and think about the future in those terms, fail to meet the imperatives and follow the British into genteel poverty. We must avoid that danger. ■

Rule: It's tough making money out of bread baking. The exception: Flowers Industries—big, profitable and growing.

Making dough

By Aaron Bernstein

In the competitive, low-margin business of baking bread, company after company is floundering, has folded or has been taken over. One has consistently prospered, though—Flowers Industries, Inc., based in the little southwest Georgia town of Thomasville (pop. 20,000).

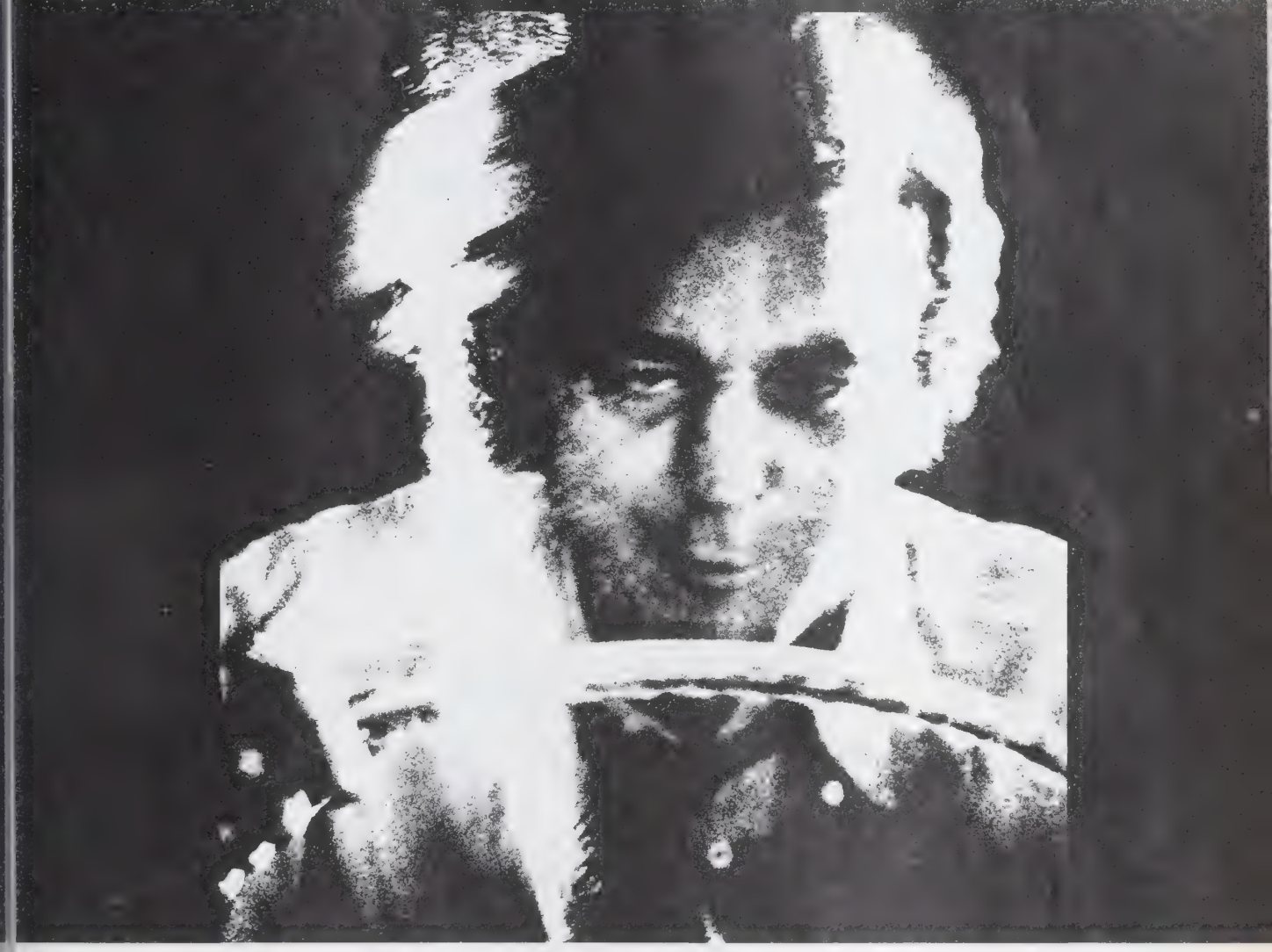
By picking up one failing bakery after another and making them profitable, Flowers has grown from 5 plants with $36 million in revenues when it went public in 1968 to a 30-plant, $500 million firm in 13 states. Flowers is the largest independent bakery left in the country and the only major baking firm that has not changed hands in the past 25 years.

The knack of turning around bakeries where others have failed has kept Flowers' earnings growing at 14% annually over the past five years, and sales at 17%. Return on equity averages over 19% on long-term debt that has been little more than 30% of capital.

The strategy of growth by acquisition began in 1964, when the company was already 45 years old; it was founded by William Flowers in 1919 as a small bakery and ice cream shop in Thomasville. The serious growth began in 1964, after his son William Jr. took charge.

Since 1964 Flowers has put the magic touch on 27 companies. Flowers' technique starts with a bakery that is failing and can be picked up cheap. Usually it needs modern equipment, which Flowers funds.

DO SOMETHING ABOUT DRUNK DRIVING.



runk driver is like a loaded gun, n you as the target. Every 20 min- s on average the gun takes aim. d another life is tragically lost. Drunk driving costs us 800,000 dents a year, and 25,000 needless ths. It adds hundreds of millions ollars to the insurance premiums all pay.

Something must be done.

The property and casualty insur- e industry is helping. As a first , we've assembled the facts you d to know about which preventive sures work, and which ones don't. ougher drunk driving laws alone are not the answer. The more severe the penalties, the more reluctant judges and juries are to impose them.

Instead, new approaches are attacking the problem at its source: the attitudes of potential offenders and of society at large. Drinking before driving must become a social stigma, instead of a socially acceptable form of homicide.

There are signs that this change in attitude is beginning to take shape. And there are ways that all of us—governments, community groups, concerned individuals—can help the change happen faster.

Our latest report, *Drunk Driving: A Killer We Can Stop,* explains what each of us can do in the life-or-death battle against drunk driving.

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Management may need to be changed, and often the product line is varied and improved. "We bite off a little at a time, take a little risk to add to the revenue base," says Amos McMullian, who took over as the first non-Flowers family president in 1976.

Each new bakery is fitted quickly into the Flowers' "reciprocal baking system." This system is widely used in the industry, but it has been honed to a fine cost-cutting edge by Flowers.

Each of Flowers' 26 baking plants is assigned a product line as soon as it is acquired. The Atlanta plant makes white bread, for instance. Opelika, Ala. makes brown-and-serve rolls. To complete the product line in its area, each plant draws on neighboring Flowers plants. "This allows us to take advantage of long production runs, which is much cheaper even with the added transportation costs," says McMullian.

Each Flowers plant manager decides almost everything except financing and which product he is assigned. A bonus system rewards local management on the basis of the record at each plant.

The local manager also sets the price of his product and sells it to other Flowers units at the same price at which he sells to other wholesalers. "By keeping the transfer price equal to the market price, we make sure everyone is honestly looking at their costs," says Martin Wood, chief financial officer and son-in-law of William Flowers Jr.

The result is one of the most efficient operations in the industry. Says Arthur Lichtendorf of E.F. Hutton, "They are able to get up to 40 full inventory turns—the time it takes to put a loaf on the shelf from the time the raw material comes to the plant—per year. They and Campbell-Taggart are the only ones making real money on bread these days."

By picking up one failing bakery after another and making it profitable, Flowers has grown to a 30-plant, $500 million firm.

With most day-to-day decisions made at the local level, corporate staff is kept to under 100, including secretaries and receptionists. Says McMullian, "This decentralized philosophy has made the reciprocal system work, and that in turn allows us to make money on economies of scale, which others can't do in this business."

Last year Flowers picked up Betsy Ross Bakeries and Purity Baking Co., both in West Virginia. Both were unprofitable and have not been turned around yet. But together with Jack's Cookie Co., a snack-food maker Flowers bought last July, they have added about $100 million to Flowers' revenue base. Flowers has also gotten into convenience foods, mainly frozen foods, in recent years, which account for 13% of sales.

The acquisition strategy has had a cloud hanging over it since 1972, when the Federal Trade Commission began an antitrust investigation against Flowers for some of the bakeries it had acquired. The resulting suit, filed in 1980, is still undecided.

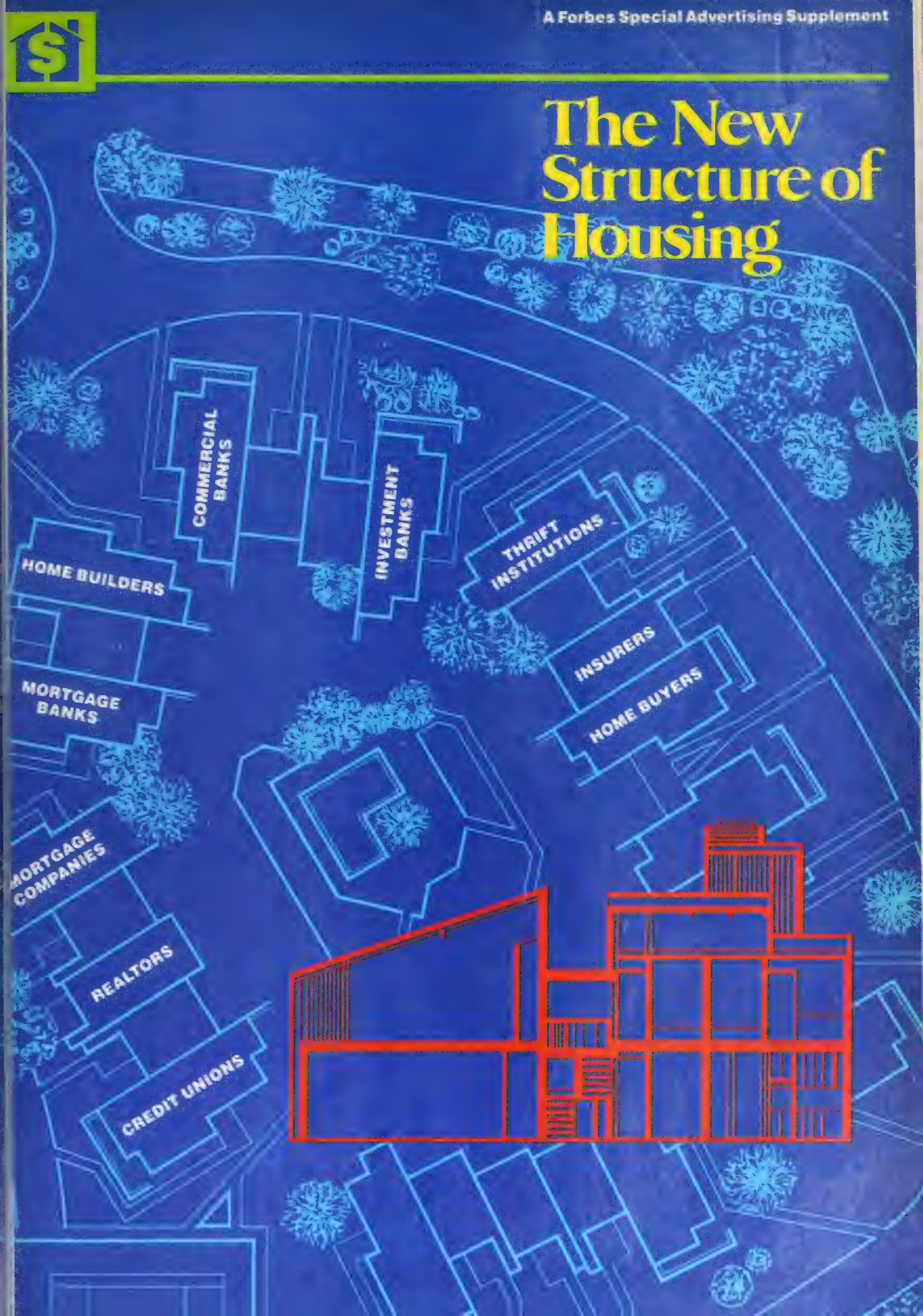
McMullian, however, points out that the FTC has not told him to stop other acquisitions Flowers has made since the investigation began 11 years ago. Nor was there any complaint when the two West Virginia bakeries were acquired, even though they seemed to follow the pattern of those challenged in the suit.

After Anheuser-Busch took over Campbell-Taggart and General Foods took over Entenmann's last year, speculation on Wall Street naturally turned to Flowers. The Flowers family, however, controls some 30% of the stock, and seven family members make their living with the company. Is it then untouchable? Says McMullian, "It would take an extraordinarily attractive offer to change our preference to remain independent." ■

Making jelly rolls at Flowers' Spartanburg, S.C. plant
Let the other fellow make the brown-and-serve rolls—and reciprocate.

A Forbes Special Advertising Supplement

The New Structure of Housing



The New Structure of Housing

By Edward T. O'Toole

Remember the good old days before inflation rode roughshod, like the Fifth Horseman of the Apocalypse, over the economic landscape?

Remember back in 1970 when you could buy a loaf of bread for a quarter, a gallon of gas for half a buck, and a very decent house for under $30,000 financed with a single-digit mortgage?

Better forget all that, friends. A 25¢ loaf of bread is water over the dam. Cheap gasoline is buried under the snows of yesteryear. A decent house for $30,000 with a single-digit mortgage? Only if there's a local Realtor on Fantasy Island.

Thankfully, the disinflation of the Eighties has put a checkrein on most of the runaway price increases of the Seventies. (And let's hope permanently—although the jury is still out.) The consumer is spending only a few cents more in '83 to fill the breadbasket than in '82 And the cost of a gallon of gas may drop below a dollar after hitting $1.50 last year.

House Prices Climb

So how about housing? Well, that's something else, unfortunately. That is, unfortunately for the 40-million additional home buyers in the Eighties, but fortunately for the millions of home sellers, as the price-trend chart below attests.

Up, up and away goes this flight curve for house prices graphed by Mike Sumichrast, chief economist of the National Association of Home Builders and acknowledged, far and wide, as one of the most reliable forecasters in the business. House prices soared in the Seventies. While they're not expected to climb quite so fast in the Eighties, you should be prepared for them to more than double—considerably more.

Mortgage rates? They've subsided significantly in recent months from the nosebleed levels of only last summer, when the going rate was 17%. In March, lenders were getting about 12¾%, down by more than ¼% from February, and at the lowest level in 32 months.

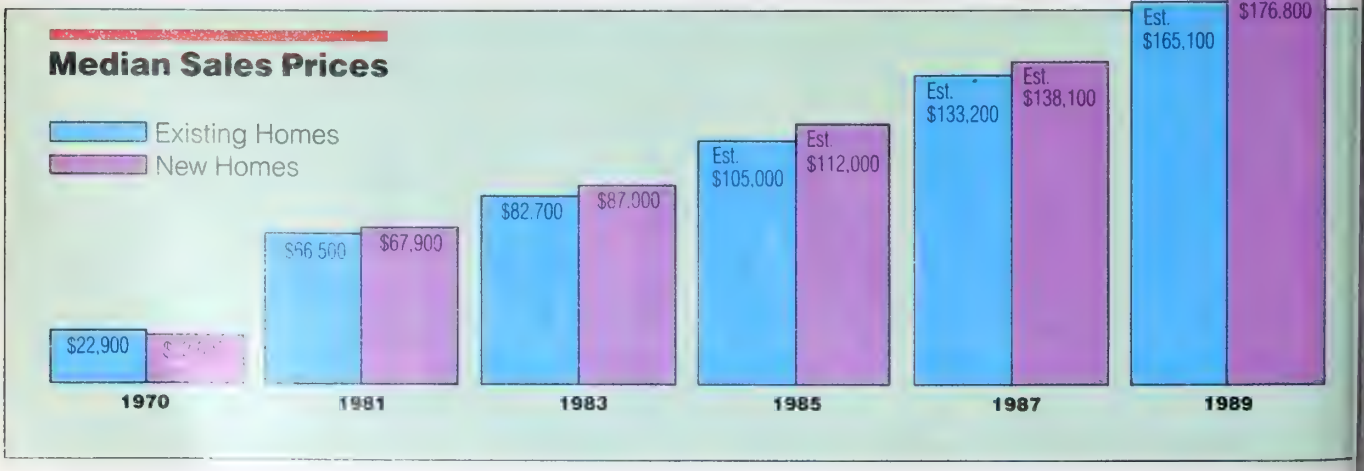
What's more, experts like Kevin Villani, chief economist of the Federal Home Loan Mortgage Corporation (aka Freddie Mac), believes these rates will come down a bit more. Kevin feels they may even get below 12% in the next six months or so. But he expects them to level off and perhaps even to begin rising again thereafter.

The message here is that, like the Flightless Dodo and the Millionaire Uncle, the Single-Digit Mortgage is an extinct species.

American Dream Fulfilled

Actually, the housing industry is all but extinct itself—at least the original industry that made the American Dream of homeownership come true. Since World War II, more than 55 million new houses and apartments have become home for an equivalent number of American families. We have become, in a generation, a nation of homeowners rather than renters. Two-thirds of all U.S. households now own their homes.

The old housing industry didn't spring full-grown from the brow of Jove. It got started a half-century ago when industry and government joined forces to shape a new system for home buying. Special mortgage-lending institutions were created. Interest rate ceilings were placed on savings accounts to assure a low-cost source of mortgage funds. Mortgage loans were insured and guaranteed. Credit, the lifeblood of the housing industry, thus could move readily from lender to borrower.



In the opinion of Bond Counsel, under existing statutes and court decisions, interest on the Series A Bonds is exempt from federal income taxes, except that no opinion is expressed as to the exemption from such taxes of interest on any Series A Bond for any period during which such Bond is held by a person who, within the meaning of Section 103(b) of the Internal Revenue Code of 1954, as amended, is a "substantial user" of the facilities with respect to which the proceeds of the Series A Bonds were used or a "related person". See "Tax Exemption" in the Official Statement. The Act provides that the bonds of the Authority and the income therefrom, including any profit made on the sale thereof, shall at all times be free from taxation of every kind by the Commonwealth of Virginia and by the municipalities and all other political subdivisions of the Commonwealth.

NEW ISSUE

$60,345,529.60

Virginia Housing Development Authority

Multi-Family Housing Bonds, 1983 Series A

Dated: January 15, 1983 for the Current Interest Paying Bonds
February 8, 1983 for the Capital Appreciation Bonds

Due: November 1 and May 1 as shown below

The Capital Appreciation Bonds and principal on the Current Interest Paying Bonds are payable at the principal office of Bank of Virginia Trust Company, Richmond, Virginia, Trustee, at maturity or redemption. Semi-annual interest on the Current Interest Paying Bonds is payable November 1 and May 1, commencing November 1, 1983 by check or draft of the Trustee mailed to the registered owner of each bond. Issuable as fully registered bonds in $5,000 denominations for the Current Interest Paying Bonds and in $5,000 maturity amounts for the Capital Appreciation Bonds, and in integral multiples thereof.

The Series A Bonds are subject to redemption prior to maturity as set forth in the Official Statement.

Current Interest Paying Bonds

$20,735,000 Serial Bonds with maturities from May 1, 1984 to November 1, 1992
$33,500,000 10% Term Bonds maturing November 1, 2004 at 100%

Capital Appreciation Bonds

$6,110,529.60 Serial Bonds with maturities from May 1, 1993 to November 1, 1998

The Series A Bonds are secured by Mortgage Loans, Revenues and other funds and assets of the Authority pledged thereto, and are general obligations of the Authority payable out of any of the Authority's revenues, moneys or assets, subject to agreements heretofore or hereafter made with holders of notes and bonds, other than the Series A Bonds, all as more fully described in the Official Statement.

The Authority has no taxing power. The Series A Bonds do not constitute a debt or grant or loan of credit of the Commonwealth of Virginia, and the Commonwealth shall not be liable thereon, nor shall the Series A Bonds be payable out of any funds other than those of the Authority.

The Series A Bonds are offered when, as and if issued and received by the Underwriters, subject to prior sale, or withdrawal or modification of the offer without notice, and to the approval of legality by Hawkins, Delafield & Wood, New York, N. Y., Bond Counsel to the Authority. Certain legal matters will be passed upon for the Authority by its Counsel, Christian, Barton, Epps, Brent & Chappell, Richmond, Virginia and for the Underwriters by their Counsel, Haynes & Miller, Washington, D. C. It is expected that the Bonds in definitive form will be available for delivery in New York, N. Y. on or about February 8, 1983. The offering of the Bonds is made by means of the Official Statement, copies of which may be obtained in jurisdictions in which this announcement is circulated from only such of the undersigned or other brokers or dealers as may lawfully offer such Bonds in such jurisdictions. Bonds of particular maturities may or may not be available from the undersigned or others at the above prices on or after the date of this announcement.

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January 18, 1983

Housing Leads Recovery

The unimpeded view in the rear-view mirror clearly shows that the fat years of economic growth in the Fifties largely resulted from the housing boom. Home building constituted a major part of the construction industry. New houses meant new washing machines, new refrigerators, new TV sets and a broad array of other durable goods. New housing developments required additional roadways, shopping centers, utilities and other services. All of which added up to increased output by the lumber, metals and other smokestack industries.

Small wonder, then, that housing has come to be known as "*the* key industry." As "an economic bellwether." The old housing industry has undergone dramatic changes, but housing still remains a vital determinant of economic development.

If real economic recovery is in fact currently in progress, its continuance will rely on a healthy housing industry. Economists generally agree that a strong performance in housing this year will not assure stable economic growth by itself. But they concur even more fully that the economy will not reach firmer ground unless housing leads the way

Since World War II, every pre-Reagan president and each Congress have demonstrated their awareness of the economic importance of housing by assigning it top priority. Housing got bipartisan support. The universal credo seems to have been: what was good for housing was good for the country.

But beginning in the Seventies, inflation demolished this traditional value system. For the first time, consumers saw their cost-of-living escalate beyond the purchasing power of their incomes. In search of higher returns for their savings, they moved billions of dollars out of thrift institutions — the major source of mortgage credit—and into money market funds.

There was an increasing awareness, too, that the best inflation hedge was a house. While inflation was rising 113% between 1970 and 1980, home prices boomed 170%. In addition to the millions of Americans in the market for houses for the usual family-related reasons, hundreds of thousands of mortgage-seekers bore down on the market motivated by interest in acquiring an investment instrument rather than an instrument of shelter.

Skyrocketing house prices and interest rates twisted the accustomed structure of the housing industry into new, unrecognizable shapes. These profound and pervasive changes included:

- A back-breaking scissors on the savings and loans and other thrift institutions that were caught in the vise of borrowing short (from depositors) and lending long (to mortgage borrowers). Hundreds of S&Ls went belly-up.
- The virtual disappearance of the 30-year, fixed-rate mortgage as the principal form of financing instrument. (Although it is beginning to make a comeback appearance now that interest rates are subsiding and thrift institutions are flush with money-market funds.)
- An "affordability crisis" resulting from rajah-level prices and interest rates that relegated all but the most affluent borrowers to the sidelines.

New Mortgages Appear

With most familiar landmarks all but obliterated, "creative financing" soon became the watchword in the housing market. To replace the conventional fixed-rate mortgage, a whole passel of adjustable kinds of loan agreements soon were in vogue. These included:

ARMS—Adjustable rate mortgages providing for variable pay-

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These funds have provided over 17,000 families affordable financing for the purchase of single family homes and have financed over 15,000 apartment units throughout the nation.

Billions of additional dollars will be required by the housing industry to satisfy future needs. We are dedicated to helping meet that demand, as in the past, through innovative methods of financing that will provide the needed capital for the housing industry.

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ment rates linked to an index— e.g., a six-month Treasury bill. This reduced the risk for the lender, who wasn't tied to any set rate, and increased the risk for the borrower, whose fixed-rate protection disappeared.

GEMS—Graduated equity mortgages whereby payments would increase annually by stipulated amounts, usually 4%. This allowed repayment of the entire mortgage within 15 years or less.

GPMS—Graduated payment mortgages that began with lower than average monthly payments. These gradually increased, theoretically in step with the borrower's ability to pay.

BUYDOWNS—A common method for builders to help their buyers qualify for mortgage loans. The buydown usually was a lump sum paid to the lender up front in exchange for a lower interest rate for the borrower.

SAMS—Shared-appreciation mortgages whereby the lender usually gave the borrower a lower interest rate in the early years of the mortgage in return for a share in the appreciation of the home at a later date.

Those are only a few of the *basic* themes in the new mortgage music to which the housing market danced beginning in the late Seventies. In reality, there were many variants to these themes. For example, Bill Matzenbach, who heads Manufacturers Hanover Mortgage Corporation, recently announced his mortgage bank has expanded its product line to include 112 variations for its FHA/VA and conventional (non-government guaranteed) mortgage programs.

The new housing industry thus supplemented the unwieldy, unmanageable, 30-year, fixed-rate mortgage diva with a sparkling new chorus line of mortgage starlets. But another major change, a genuine change of greater significance, was also in the making: the rise of the secondary market as the chief source of mortgage funds.

Secondary Market Expands

The secondary mortgage market, in effect, is a network embracing mortgage originators who sell their loans to institutional investors for portfolio purposes. Originally, the secondary market played only a supporting role in the mortgage lending/borrowing process. For the most part, the practice of the savings and loan institutions and other originators would be simply to warehouse their mortgage loans and live off the spread. The spread was the profitable differential between what an originator would pay in the form of interest rates on deposits and what it would earn as interest on its mortgages. A mortgage originator attracting enough deposits to meet its loan demands had little reason to resort to the secondary market.

That was in the old days. But to

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March 4, 1983

$401,696,552.27

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Guaranteed Mortgage Pass-Through Certificates
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BOOM.

If you listen carefully you can hear the sound of falling interest rates.

There is a modest boom underway in the housing industry, and one of its causes is falling interest rates. As mortgage interest rates drop, housing indicators are looking up. And, as goes housing, so goes much of the nation's economy.

According to many analysts, a gradual, housing-led recovery is underway nationwide and is expected to continue throughout 1983.

Of course, falling interest rates are not the sole cause of the housing boom. The release of pent-up demand is a corollary cause. More young families are looking for more first homes now than at any time in our nation's history. You need only listen to most American families to realize that a home of their own is a deep and persevering need.

With that in mind, we have every reason to believe that the housing-led recovery will continue, as the sound of falling interest rates becomes louder and louder.

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There's never been a better time for Wall St. to meet Main St. at Freddie Mac.

'he housing recovery is underway. ınd Freddie Mac, with its capabilities, ·ack record and programs, is ready to ıove Wall Street dollars to Main treet homes.

Chartered by Congress as a part of ıe Federal Home Loan Bank System, reddie Mac has become the leader of ıe secondary market for conventional ıortgages. We've sold more than $65 *illion* worth of conventional mortıge securities in our short history. 'hat's more than anyone else has— ver. And we did it without ever ecording an unprofitable year.

Freddie Mac has responded to the ıanging structure of housing finance, eveloping new programs that meet ıe needs of lenders and borrowers. lere are some of the ways:

aily Offer Replacing our weekly uction, the establishment of a daily rice offer gives lenders greater flexiility and allows them to balance their ssets and liabilities more effectively.

-and 5-Year ARM's After a thorough urvey of adjustable rate mortgages, reddie Mac has developed a new rogram of 30-year mortgages with - and 5-year payment adjustments ed to comparable Treasuries. It is esigned to give lenders the option of electing the index best suited for their ortfolio management needs. We elieve our new ARM program will ain substantial support from lenders nd investors alike.

Guaranteed Rates on Future Deliveries With the creation of 30-, 60-, 90- and 120-day forward delivery commitments, Freddie Mac will guarantee interest rates at the time of commitment. Our new program enables lenders to be more responsive to their customers and to plan ahead with greater certainty.

15-Year Fixed Rate Program Attractive to lenders because of the shorter term, to home buyers because of the fixed rate, and to builders because of the improved impact of their buydown dollars, the new 15-year mortgages have broad appeal throughout the housing industry. After assessing investor interest in this recent development, Freddie Mac plans to create 15-year P.C.'s (Participation Certificates) in response to it.

Energy Underwriting Freddie Mac has devised new guidelines to enable lenders to identify energy-efficient homes more readily, thereby enabling borrowers to qualify more quickly. We estimate this program could qualify a significant number of additional home buyers. That's many more customers for *our* customers.

Guarantor Program Introduced by Freddie Mac when high interest rates were crippling savings and loans, this program allowed thrifts to "swap" their low-yielding mortgages for our more liquid P.C.'s. In 1982—a depressed housing year by any standard—we did a record volume of $28.3 billion. "Swaps" accounted for 90% of that business. Today, this program applies to new mortgages, as well, and helps lenders maintain liquidity when they need it.

If you're looking at the opportunities today's housing recovery offers, you'd do well to take a closer look at Freddie Mac. For more information about us and our programs, fill out and send us the coupon below. In the 13 years we've been in business, business has never looked so good.

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satisfy the great American dream in the post-war era, mortgage originators found themselves increasingly tapping the secondary market for additional loanable funds. In 1970, the secondary market had provided about one-third of the $44 billion that went into mortgage originations. By 1980, this had increased to about half of a total of $144 billion. This year, the secondary market is expected to generate as much as 80% of the $160 billion expected in residential mortgage loans.

The biggest investment banks on Wall Street fill critical roles in generating secondary market funds for residential mortgages. Salomon Brothers, for example, long one of the leaders in fixed-income positioning and trading, also has been one of the key innovators in mortgage financing. Recently, Salomon Brothers joined forces with Banco Mortgage Company, a mortgage banking subsidiary of Northwest Bancorporation, and with MGIC Services, the giant insurance firm, in a $2 billion shelf registration. Through a newly named conduit, Residential Funding Corporation, the trilateral combination of a big investment bank, a big commercial bank, and a big insurance company will make available a huge pool of funds for mortgage loans.

Goldman Sachs is another blue-chip securities firm that is breaking new ground in housing finance. Like Salomon Brothers, Goldman Sachs has been one of the secondary market wheelhorses for the housing industry for many years. But the firm also has been a leader in a relatively new field of mortgage loans, known in financial circles as "public financing for the housing market." Public-finance mortgage securities are tax-exempt securities (backed by residential loans), which state housing authorities and local municipalities began issuing in the Seventies. As interest rates and house prices soared, the American Dream appeared to be ascending far beyond the reach of most U.S. families.

The tax-exempt feature of the securities the municipal bodies (state authorities included) issued enabled mortgage rates to be set two or three percentage points below the going rates for potential home owners.

From a standing start in 1978, public-finance mortgage securities have become an increasingly significant factor in house financing. This year, some $12 billion in such issues are expected to be marketed, which would provide for financing approximately 225,000 one-family houses.

Marketing New Issues; Secondary Market Mainstays

Just about all the big names among Wall Street investment banks, besides Salomon Brothers and Goldman Sachs, are aggressively pursuing the public-finance business. Kidder, Peabody, for example, has been a manager of some $200 million of securities issued by the Alaska Housing Finance Corporation over the past year. A tax-exempt issue such as this enables a home buyer to mortgage the first $90,000 of the price of the house at a 9% rate (for veterans), or 10% for others.

Kidder, Peabody, has been among the leading innovators on Wall Street in designing new financial instruments for housing finance—such things as compound interest securities (a variant of zero bonds), as an example.

Another familiar name in house financing is Dean Witter Reynolds, also an aggressive innovator and underwriter. In 1982, Dean Witter managed almost $2 billion of new issues for ten state authorities and 38 other municipalities. Dean Witter's imprint as originator is on such developments as senior lien/junior lien bonds and insurance-backed multi-family bonds.

Some of the larger regional firms also have been highly successful participants in the national mortgage markets. Rauscher Pierce Refsnes, for example, has been

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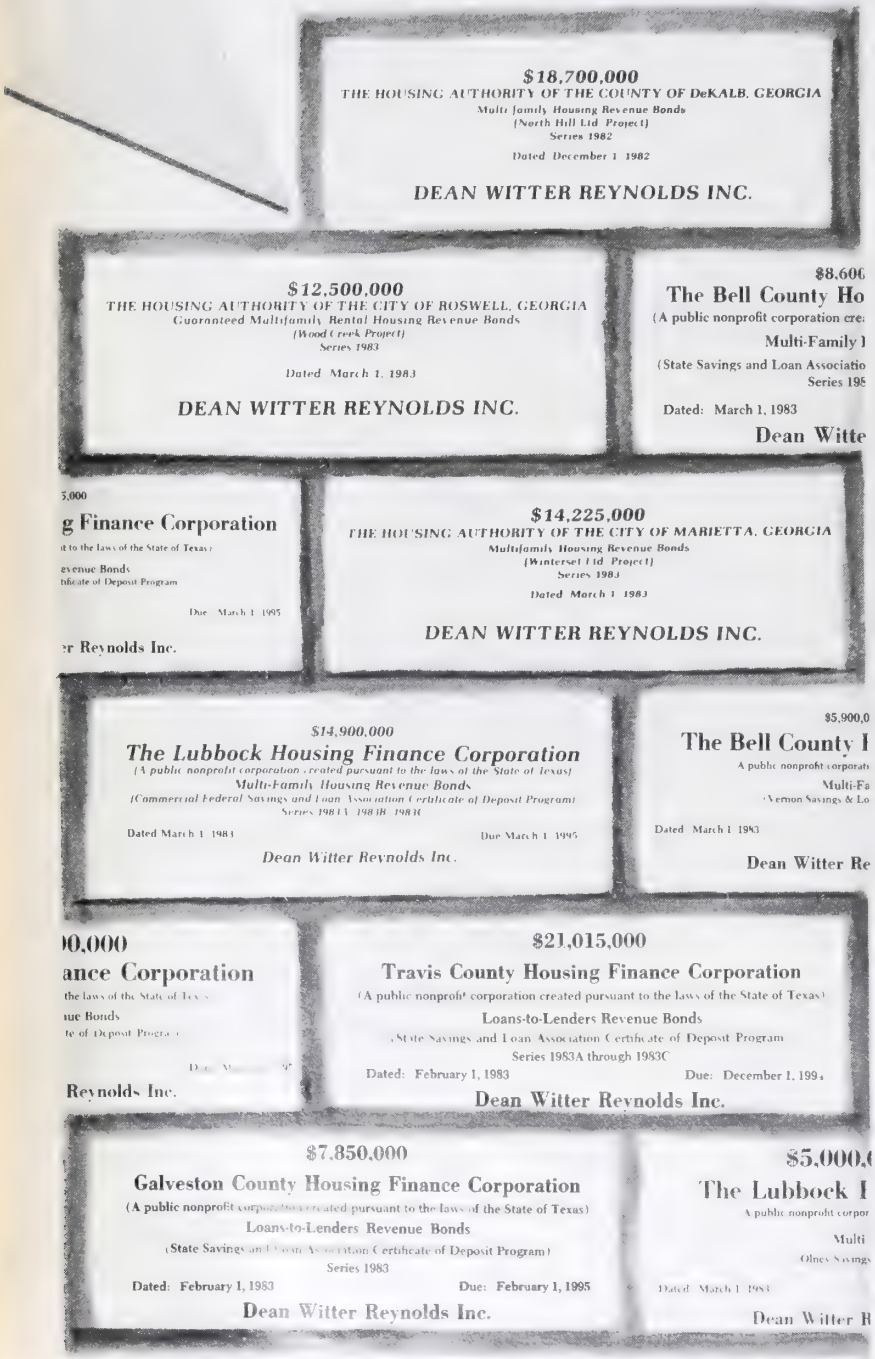

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manager or co-manager of 42 public finance issues since 1979. The total dollar volume of these issues handled by the Dallas-based investment bank amounted to almost $1.5 billion.

There's a lot of fingers crossed among these firms these days. The enabling legislation which gave rise to the public-financing issues is scheduled to expire on Dec. 31, 1983. Unless this sunset date is extended, the tax-exempt mortgage subsidy bond issues will expire as well. Lately, the sentiment along Wall Street has been much more optimistic about the likelihood of an extension than ever before.

In all, there are about a dozen Wall Street securities firms that are the mainstays of the secondary market. A. G. Becker has become a rising star in the market during the past four or five years with a full complement of traders, underwriters and distributors of mortgage-backed securities to institutional investors. E. F. Hutton is a major factor in all areas of the burgeoning mortgage-backed securities market, as are Merrill Lynch, First Boston and Lehman. Their activities include:

Trading and Market-Making. Volume of these transactions relating to mortgage-type securities is now booming along at an estimated $360 billion annual rate. These securities involve packages of whole mortgage loans, participation certificates, passthroughs, and such other instruments as intermediate bonds collateralized by residential loans.

Underwriting Agency-type Issues. The larger investment banks also underwrite and trade the debt obligations of the three entities created by Congress to serve the secondary market: The Government National Mortgage Association (Ginnie Mae), the Federal National Mortgage Association (Fannie Mae), and the Federal Home Loan Mortgage Corp. (known variously as Freddie Mac or The Mortgage Corporation).

As the middlemen in the secondary market, the major Wall Street firms are in an excellent position to read the discernible trends in the housing industry. The consensus view of what they anticipate for this year and over the near-term is reflected in the profile of "The Housing Market" on page 13.

Demand Outpaces Supply

Longer-term, meaning out through the Eighties, the expectation is for housing demand to still decisively outpace supply. One reason is the burgeoning of the 24-to-34-year-old population group, the fat years for family formations. This prime house-buying population will number about 40 million individuals (annual average) in the remaining years of the decade now under way. They will be in the market, many of them, for new homes with an average price of $145,000 by 1988, and of course higher thereafter. (Table page 2).

As past and present experience clearly indicate, the prevailing range of interest rates is the jockey controlling the housing market's course. Nor will this relationship change in the future. Given such massive imponderables as the size and disposition of the federal deficit, no one is prepared to wager more than an old button about precise developments of interest rates from now on.

But the housing market professionals have to plan their business and have to make their plans in the context of likely developments in mortgage rates between now and year-end. One such professional is Jim Wooten, president of Lomas & Nettleton, the largest mortgage bank in the country. A mortgage banker for over 36 years, and the current president of the Mortgage Bankers Association, his views are:

"Short-term rates should continue downward for a few months before any movement upward. Mortgage rates should be flat, or slightly rising, with movement from ½ to 1½% upward during the third or fourth calendar quarter."

The Housing Market Unit Forecasts / Million Units

	1981	1982	1983E.	1984E.	1985E.	Percent Change '81-'82	'82-'83	'83-'84	'84-'85
Total Units									
Starts	1.10	1.05	1.45	1.70	1.90	– 4.55	38.10	17.24	11.76
Begin. Under Construct.	0.90	0.70	0.70	0.90	1.00	–22.22	0.00	28.57	11.11
Completions	1.25	1.05	1.25	1.60	1.80	–16.00	19.05	28.00	12.50
Ending Under Construct.	0.70	0.70	0.90	1.00	1.10	0.00	28.57	11.11	10.00
Single Family									
Starts	0.70	0.65	1.00	1.20	1.35	– 7.14	53.85	20.00	12.50
Begin. Under Construct.	0.50	0.40	0.45	0.70	0.80	–20.00	12.50	55.56	14.29
Completions	0.80	0.60	0.75	1.10	1.25	–25.00	25.00	46.67	13.64
Ending Under Construct.	0.40	0.45	0.70	0.80	0.90	12.50	55.56	14.29	12.50
Multi-Family									
Starts	0.40	0.40	0.45	0.50	0.55	0.00	12.50	11.11	10.00
Begin. Under Construct.	0.40	0.30	0.25	0.20	0.20	–25.00	–16.67	–20.00	0.00
Completions	0.45	0.45	0.50	0.50	0.55	0.00	11.11	0.00	10.00
Ending Under Construct.	0.30	0.25	0.20	0.20	0.20	–16.67	–20.00	0.00	0.00
Percent of Total Starts									
Single Family	63.64	61.90	68.97	70.59	71.05				
Multi-Family	36.36	38.10	31.03	29.41	28.95				

SOURCES
Commerce Dept. data, Merrill Lynch estimates

One of the U.S.' premier intelligence officers has come into the business world and is dismayed at what he finds.

"Admiral, I wish we had the time..."

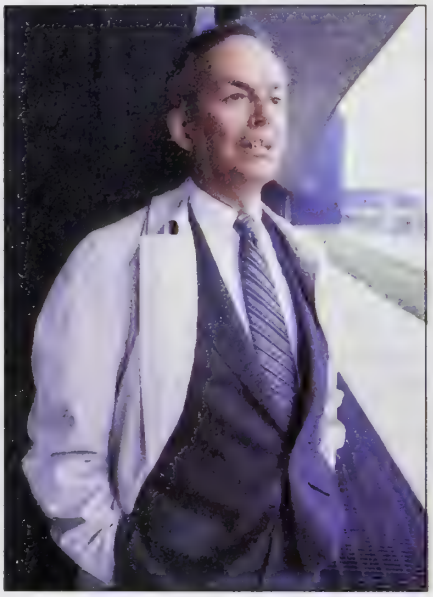
By Jerry Flint

BOBBY INMAN looks ahead to the late 1980s and 1990s and sees "intensive economic competition, with our principal allies and with the Soviets, for raw materials, natural resources and markets, in areas of the world that are not all that stable."

A perspective to ponder because Inman, 52, is not just another easy-chair analyst. A former admiral, he was deputy director of the Central Intelligence Agency for a year and before that director for four years of the even more secret National Security Agency, which is in the business of intercepting communications and protecting U.S. codes. He stepped into private life last year and was recently appointed head of Microelectronics and Computer Technology Corp. (MCC), the research venture of 11 companies designed to help the U.S. stay competitive in advanced technology fields.

Inman expressed a few arresting insights from his old job and his new career in a recent interview with FORBES. High on his worry list is improved Soviet mobility.

"In Stalin's day, when the Soviets talked about using force, they generally talked of 200 miles from where they had established dominion," he says. "By the middle 1950s it was 600 miles. By 1964-65 it was 1,500 miles. By 1975 that line disappeared." Inman speaks admiringly of the swift strike of 15,000 Cubans and supplies into Angola in two weeks, the movement of another 15,000 into Ethiopia. "In April of 1979 they did a massive airborne exercise into Mongolia, much of which they ended up executing nine months later on Christmas Day when they moved into Afghanistan."



Bobby Inman, NSA, CIA, MCC
It starts in the high schools.

What lesson should we draw? Inman thinks more emphasis should be put on the readiness of conventional forces and the politics of using them instead of emphasizing nuclear weapons. And he is emphatically not talking about the highly publicized U.S. Rapid Deployment Force. "Paper capabilities are not terribly impressive to our adversaries," says the 30-year Navy man disdainfully.

How about U.S intelligence capabilities? Not what they were, says Inman, but he blames economics more than posturing congressmen and media headline-hunters. "In every letter to an ambassador from 1967 to 1981, at least almost a full page stressed the critical importance of reducing the American presence in his country. Nowhere in those letters can I find a stress on the criticality of knowing what went on in his country in great detail." That was the result of cutting people. "In Iran you didn't need clandestine agent nets. What you needed were bright youngsters, political officers, economic officers, cultural officers, to sense and understand the building fundamentalist movement. But in the interest of being cost-effective we reduced much of the base for human intelligence collection abroad."

It wasn't necessarily a bad decision, he says, it was a tradeoff. The U.S. spent on technology and got the spy-in-the-sky system that gives warning against surprise attack or any Soviet decision to make major use of force. But "in that long decade of diversion and drawdown of resources, we gave up almost all of our in-depth coverage of Western Europe, Africa, Latin America, South Asia, Southeast Asia"—just the areas where Inman sees the coming struggle for raw materials and markets.

Inman's new organization, MCC, was established at the instigation of Chairman William C. Norris of Control Data Corp. to give the U.S. a private enterprise version of Japan's MITI to "bring together a critical mass of R&D" in areas of potential technological breakthrough.

MCC, with member companies such as Sperry, Honeywell, NCR, RCA and Motorola, is concentrating initially on packaging integrated circuits; computer software, including productivity and cost reduction; computer-assisted design, and advanced computer design. MCC's employees will be drawn from the 11 member companies, but MCC won't turn out any products. Each of the members will be entitled to use the results of the research in its own products.

Where is the entrepreneur in all this, the traditional source of technological breakthrough in U.S. business? "We would never want to constrain the individual entrepreneur," says Inman, but it is time for bigger battalions—"you are not going to get those breakthroughs that compete with the concentrated Japanese effort by the single individual entrepreneur." Inman, of course, has spent a life inside government and thus may be forgiven such conventional wisdom. Then again, his experience with the U.S. business community in the six months after he left government was not reassuring. "Time and again when I would ask, 'Where do you expect to see your corporation five years from now, ten years from now?' the answer I would get is: 'Admiral, I wish we had the leisure time to do that, but we have got to worry about next quar-

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ter's profit.' "

Maybe Inman, who earned a reputation in Washington as one of the U.S.' outstanding public servants, can help change such chair-warmer attitudes. His impatience with what has been happening lately in America is evidenced in a personal anecdote. His son graduated from a good suburban Washington high school and went into engineering at the University of California at Irvine. "But then he had to take some makeup courses. So he is going to be an extra half year to a year at university simply because his high school education did not match the standards they wanted." Good luck, Admiral. ■

Quick, name a city where total employment is up over the past three years. Would you believe one is New York?

Service City, U.S.A.

By James Cook

WHILE MOST OLDER cities in the U.S. have been rocked badly by the recession, New York, the nation's largest, has so far sailed through with relative calm. Though month to month there may be wide variations, New York's 1982 unemployment rate of 9.6%, though higher than 1981's 9%, is not only somewhat less than 1982's 9.7% national average but represents a mere 6.2% deterioration for the city, vs. 29.1% for the U.S.

Since the national economy topped out in 1979, New York's total employment has actually *increased* slightly—by 2.1%—a record topped only by Dallas, Houston and Atlanta among major metropolitan areas. Despite the recession, New York's economy was healthier than it had been in over a decade.

The seemingly simple reason for New York's stability: Over the past decade, New York has come to depend on services, not manufacturing, for its basic economic well-being, and services have proved the most stable element in the U.S. economy these days. Says Samuel M. Ehrenhalt, the regional commissioner of the Bureau of Labor Statistics, who spends most of his time monitoring New York and New Jersey: "We just didn't have great concentrations of vulnerable industries."

To outsiders, New York seems always to have been the exemplar of a service economy, but, in terms of jobs, it was and is the U.S.' largest manufacturing center. Hidden away in the backwaters of Brooklyn, the Bronx, Staten Island and even Manhattan are tens of thousands of manufacturing businesses that sustained New York's economy for a century or more. But after the 1969-70 recession, everything began to go wrong. With labor costs elsewhere significantly lower, manufacturers began to pull up stakes and move out. The garment business, New York's number one manufacturing industry, fled to Korea, Taiwan and even North Carolina. The city had roughly 1 million manufacturing jobs in 1955, 766,000 in 1970 and 459,000 last year. The decline in manufacturing jobs continues.

New York, of course, is unique among U.S. cities. It's the U.S.' great international city—the cultural and intellectual center of the U.S., as Paris, London, Rome, Amsterdam and Tokyo are of their respective countries. Cultural activities alone pump $5.6 billion a year into the regional economy and generate 117,000 jobs. New York has everything these other capitals have, and more. The U.N.'s presence even makes it the capital of the world. The one thing it lacks that other world capitals have is the presence of the national government itself. "I think sometimes," says Ehrenhalt, "that the basic problems of New York City go back to 1798, when the capital was moved out of here."

But even as its manufacturing economy was collapsing, the enormous strength of the city's services began to assert itself. "Beginning around 1977," Ehrenhalt says, "the city began to turn around in areas where it had competitive strength. Banking and the securities industries. Health services. Business services like advertising, computer services, legal and accounting services. The cultural area—media, communications. New York was reasserting its strength as a national and international economic, cultural and financial center."

Unique though it is, New York is also demonstrating the strength that all true cities have had since the beginning of time: their ability to bring people face to face. It's an edge that in a more limited way many of the U.S.' older industrial cities still retain. As New York University economist Thomas Stanback points out,

To hell and back

In the Seventies, New York surmounted the severe unemployment problems many older cities are just beginning to encounter.

similar service transformations are under way in Chicago, San Francisco, Los Angeles, Atlanta and even Philadelphia and Cleveland. Stanback foresees similar development in what he calls functional nodes: cities that act as specialized service centers to manufacturing operations conducted elsewhere—industrial centers like Pittsburgh, Akron and Rochester.

The reshaping of an economy is a long, painful process—as cities like Youngstown, Detroit and Cleveland are learning—but it can be done. With services dominating the economy, New York now boasts more jobs in finance than in all manufacturing.

The service sector itself, Ehrenhalt concedes, is undergoing a transformation as office automation progresses. With modern communications it doesn't matter whether you process credit cards in New York, North Dakota or Timbuktu, so back office activities are moving to lower-cost areas outside the city. But automation in itself doesn't worry Ehrenhalt. "We've had a great deal of automation," he says, "but we haven't had enough. Automation means productivity increases. You need fewer statistical clerks, but you need more people to handle the increase in output."

What does worry Ehrenhalt, and what worries a lot of others in cities all over the U.S., is that the people who have the new jobs in New York's service economy aren't the people who lost the old jobs in manufacturing. The new jobs involve considerable technical and educational skills—white-collar skills—and these have gone pretty much to New York's commuters. They continue to nail down 70% of the new jobs being generated. Which leaves New York—as it may leave cities all over the U.S.—with a growing number of hard-core unemployed. "If you lose your job as a sewing machine operator," Ehrenhalt says, "where do you go?

"One of the questions that worry you," he continues, "is whether that gives you enough of a base for the future. Is the economy diversified enough? Is it broad enough to sustain job expansion and economic expansion for the city's population? The expansion has been very strong in the largest companies, but small businesses have not participated proportionately, and those are the firms noted for innovativeness and vigor."

But such problems exhilarate rather than depress Ehrenhalt. "These are issues of a growing economy and not a declining one," he says. "The city's growth offers some prospects for dealing successfully with them." ■

Texas Monthly's Mike Levy has legendary success behind him at age 36. What does he do for an encore?

Home, sweet home?

By Toni Mack

ENTREPRENEURS ARE TWICE blessed. They can have the adrenaline-pumping joy of the early struggles and the soul-satisfying sense of accomplishment that comes with success. Michael R. Levy, now 36, remembers publishing the first issue of *Texas Monthly* in February 1973 on a meager stake borrowed from his father, a Dallas plumbing contractor.

Levy and his then-novice editor, William Broyles, worked 100-hour weeks, coaxing writers to work for a trifle, addressing Rotary Clubs, cajoling advertisers. They ate at roadside diners and slept in cheap motels.

"Our first printer was always about six months behind billing us," says Levy. "If he'd been timely, we would've been out of business."

This chaos is recalled, of course, in tranquility. *Texas Monthly*'s success has become a publishing legend. Today, fat with ads and hailed as the best among city and regional magazines, it throws off pretax profits estimated by outsiders at $1.5 million yearly.

"*Texas Monthly* has evolved from a pissant magazine into a major Texas institution," says Levy, surrounded by three National Magazine Awards in his comfortable office at *TM*'s Austin headquarters.

But time moves on and there is always another mountain. *Texas Monthly* is at a critical time in its life. At 290,000, circulation growth has become increasingly costly, and Levy talks of limiting circulation at 300,000. Advertising pages were down 10% last year and are off 9% so far this year. Texas, of course, is in recession, and this has inevitably hurt advertising, which, at any rate, remains healthy. But it may have hurt, too, that founding editor Bill Broyles has departed, first to edit *California* magazine, which Levy acquired in 1980, and last summer to *Newsweek*.

Magazine publishing is a catty world, and there are those in the business who connect Broyles' departure with a certain loss of "magic" in *Texas Monthly*. But the *New Yorker*'s president, George Green, a friend whom Levy called for advice in *TM*'s early days, has more perspective. All magazines, he says, go through a phase "when the reader gets a sense of déjà vu. It's reader fatigue." Whatever its cause, it is a problem that Levy and his new editors will have to deal with. Can *TM* magazine create new excitement at a time when the oil glut and peso devaluation are emptying Texans' pockets? Levy turns aside questions about editorial approaches, referring them to his editors, Gregory Curtis and Nicholas Lemann, who differ on questions of long-term aims.

For now, at least, Levy's 97%-owned Mediatex Communications Corp. stands or falls, still, on the basis of its flagship magazine. Attempts at diversification have proved disappointing. *California* and a five-year-old book-publishing venture are losing money. The troubles at *California* have taught Levy, a Wharton School graduate who later studied law at the University of Texas, a few lessons. One is how shrewd a businessman is Rupert Murdoch. Levy paid Murdoch $3.2 million for *California*—then called *New West*—when it was losing about $3.5 million a year. Still, a magazine based in California, even more populous and wealthy than Texas,

Publisher Michael Levy in his Austin office
"I'm no empire builder," he insists.

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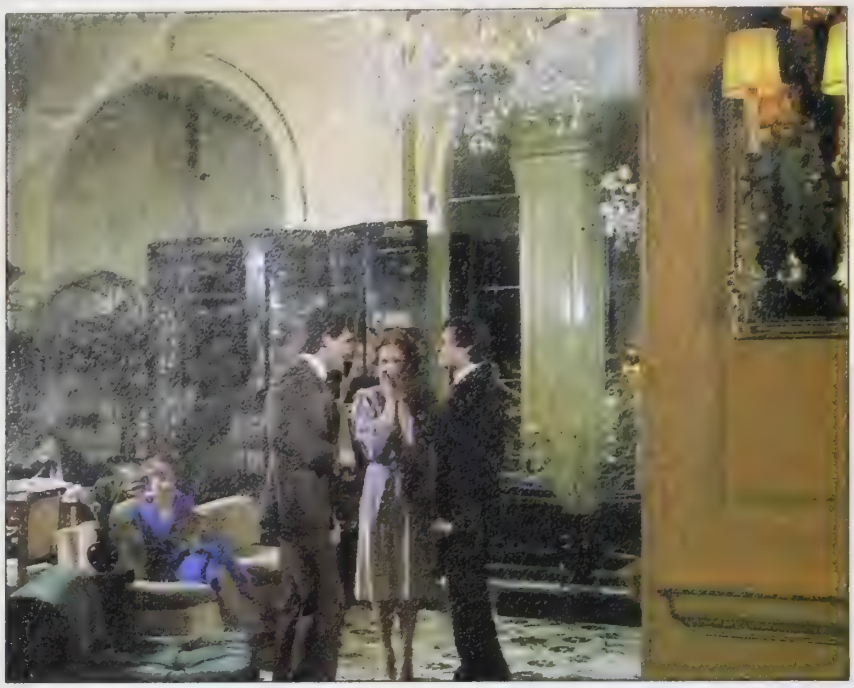

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seemed a natural to Levy. But he learned how difficult it is to transfer the *Texas Monthly* formula of urban sophistication overlaid on mythic nostalgia. California was no Texas-on-the-Pacific. It had no journalism vacuum, little Texan-like state chauvinism and less interregional trade of the kind that brings Midland oilmen to Dallas jewelry stores and Brownsville citrus growers to Houston shopping malls.

Levy has had to struggle to cut his *California* losses to a forecasted $850,000 this year. Ad revenues were up 15% last year, but this summer Levy will bow to pressure for separate ad sections in northern and southern California. He is gambling that new revenues will outrun an estimated 5% production cost rise and revenues lost when some advertisers switched

The New Yorker is said to define Levy's goals for Texas Monthly. What are those goals? He may not know himself.

to less costly regional ads. *California* is unlikely to return a profit for two more years, if then.

So Levy is thrown back upon his brainchild, whose continued success is more important to him than ever (*California* he now dismisses as "an investment"). "I'm no empire builder," he declares. "The thing I do best is publish *Texas Monthly*." And he does it intensely, getting to his office before dawn, staying late. He calls the magazine his fourth daughter (the real ones are ages 7 to 10).

At Wharton and later in his first magazine job, at *Philadelphia*, Levy yearned for his home state. His *Texas Monthly* has always had a stronger sense of place than even Harold Ross' original 1920s *New Yorker*, the long-term success of which is said to define Levy's goals for *TM*. What are those goals? He may not know himself.

Levy's friend Herb Lipson, confirmed easterner and publisher of *Philadelphia*, tells of a visit to Austin to see his onetime ad rep. "We were in a restaurant on top of a bank building," says Lipson. "Mike looked out and said, 'Herb, this is God's country. Isn't it great?' I didn't know what he was looking at. His dream, I guess." Not many people think Levy's dream will be satisfied by running a nice little regional magazine. ■

Want to reduce your labor force? Careful. You may have to hire a computer to hand out the pink slips.

Fear of firing

By Richard Greene

YEARS AGO, life was simpler. If a company wanted to lay off a couple of thousand employees, executives simply decided where to cut back and told supervisors to post the necessary notices.

Don't try that today. It leaves management open to all sorts of civil rights suits. Fired employees can claim they were dismissed because of sex, race, religion or age. That leaves employers open to suits from a large percentage, possibly even a majority, of its workers. That's why the so-called LIFO system of layoffs has emerged. The last employees hired are fired first. This is obviously inefficient, because it often gets rid of the most aggressive, innovative new people. But, for a while at least, LIFO firings made the courts happy.

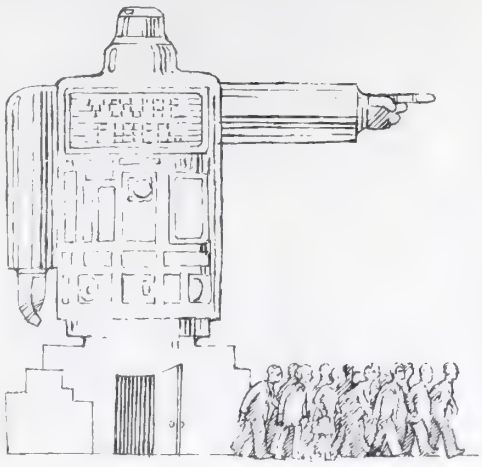
No longer. A case styled *Boston Chapter, NAACP* v. *Beecher* will soon be heard by the U.S. Supreme Court, and it may establish a new theory of termination law. The problem is the obvious Catch 22. In laying off the most recently hired, many corporations also wind up penalizing minority employees who were recruited through affirmative action programs.

The Boston case involves police and fire departments that had to lay off workers because of heavy budget cuts. Unfortunately, roughly half of the blacks and people of Latin descent in those departments were hit with planned layoffs. The NAACP doesn't argue that there was any intention to discriminate. It simply states that by firing recently hired workers, blacks and people from Latin backgrounds were unjustly affected.

"We . . . must recognize that whites as a group reaped significant advantages in the past . . . at the expense of blacks and Hispanics and that a last-hired-first-fired seniority system perpetuates the past exclusion of minorities," says the court of appeals opinion in the case. "This is not a case of wrong or right; it is a case of two competing rights, earned seniority versus racially balanced police and fire departments."

What's a company to do? How can any manager pare down effectively?

One fresh idea comes from Stephen Cabot, a partner with Pechner, Dorfman, Wolffe, Rounick & Cabot in Philadelphia. His firm specializes in labor law, and Cabot has designed a highly structured system that he thinks might make the judges happy. Under it, every employee is rated according to criteria—such as communication skills and reliability—picked both by workers and supervisors. Then individuals are laid off, department by department, on a strict point system. Cabot's method has been used in about a dozen of The Forbes 500s and has drawn no significant challenges.



"Not only does this demonstrate fairness, evenhandedness and objectivity to the courts," he explains, "but it also satisfies the employees. Even if a company retains its best workers they will not be particularly effective if they feel its system of layoffs screwed their colleagues."

If Cabot is right, the day of computerized firings may be at hand. But even this cold objectivity has its price. One big energy company recently laid off 2,000 employees using Cabot's system and reports that it cost $100 per person simply to decide whom to fire. Justice, if justice all this be, is certainly costly these days.

We wuz robbed

This opinion is an act of judicial savagery that furthers the corrupt goal of destroying effective enforcement of antitrust laws." Granvil Specks, partner in the Chicago law firm Specks & Goldberg, Ltd., speaks the words with indignation. His outrage, however, is at least partly based on pecuniary considerations. His firm has just suffered a brutal cut in litigation fees.

The lawyer is complaining about Judge Joseph McGlynn's decision to cut plaintiff's legal fees from $20.2 million to $4.3 million in the fine-paper antitrust litigation.

Specks' own firm's fee was slashed from a requested $4.3 million to only $510,000. Specks alleges that will not even cover overhead on the case, in which 15 fine-paper manufacturers were accused of price-fixing.

Not all legal experts share Specks' rancor, nor that of law firms whose fees were sharply cut. Judge McGlynn's move may help keep everyone's legal expenses down. "This case will lead other judges faced with class-action litigation to monitor attorneys closely to avoid overly high fees," says Ed-

win Rome, senior partner with the Philadelphia law firm Blank, Rome, Comisky & McCauley.

The fine-paper case, of course, is certainly not the first in which a judge has cut attorneys' fees. But it is drawing attention in legal circles because of the large dollar amounts. The plaintiffs' attorneys originally requested a sizable 40% of the $50 million settlement. When he made his 80% cut McGlynn complained about duplication of labor and the lack of sufficient proof of billed hours.

"This should make everyone who has ever put in for attorneys' fees more careful," says Ira Millstein of New York's Weil Gotshal & Manges, the firm brought in by the defendants to protest the high fees awarded. "And that's how it should be."—**R.G.**

Numbers Game

Here's a hot accounting battle that pits real-world worries against theoretical truth.

Credits when they're due?

By Christopher Power

One of the chronic headaches of the makers of accounting rules is again pounding with that familiar dull throb. The pain comes from investment tax credits and the complex question of how companies should report them to shareholders. In the old days, corporations had to spread the credits out over the life of assets, which kept earnings down. Then, in 1971, Congress allowed the credits to be shown on public income statements in the same year they were first taken for tax purposes. But the 1982 tax reforms have complicated matters.

Congress now says that companies claiming the investment credit, usually 10%, must reduce the depreciable value of the asset getting the tax credit by half the credit. Take a $10 credit on a $100 widget, and you must reduce its depreciable value to only $95. Over time, in effect, this means that taxpayers will get only a portion of the full 10% tax credit.

This creates a problem for the accountants. How should they record that reduction in the value of the tax credit? There are two schools of thought. The Financial Accounting Standards Board has recently ruled that companies must show that reduction immediately, along with the tax credit itself. Most of the Big Eight accounting firms and companies like Atlantic Richfield, Monsanto and Scott Paper—which are primarily concerned with the logic of the issue—back up the FASB.

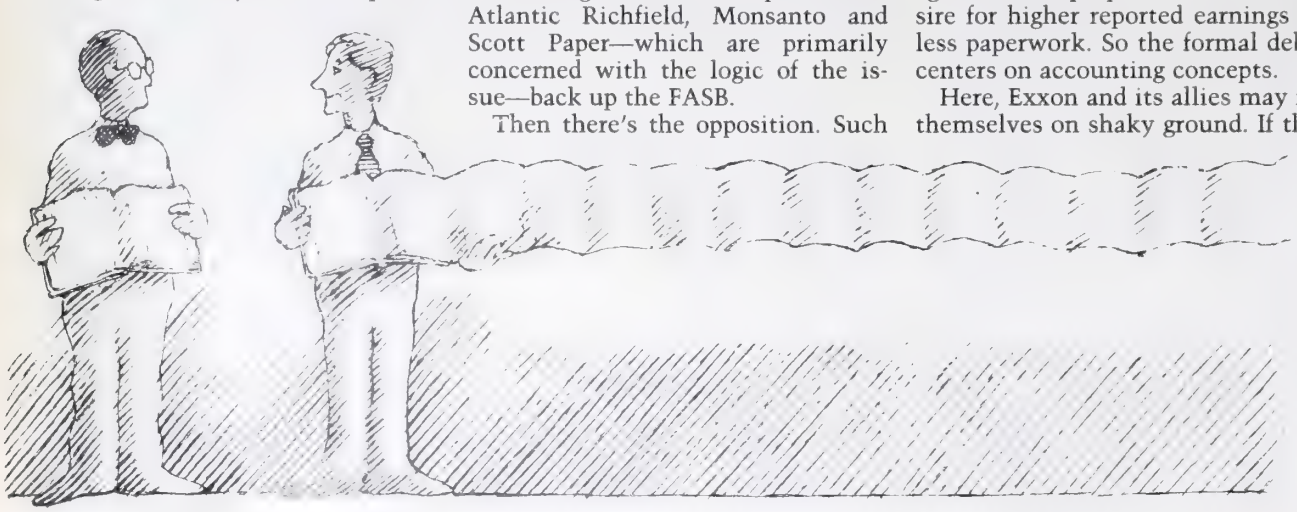
Then there's the opposition. Such industrial giants as Exxon, International Paper, Time Inc. and United Technologies have written strongly worded letters to the FASB arguing that its rule on this seemingly minor question should be changed.

The dollar amount involved here for most companies will only rarely be large. At Exxon, for example, it will probably amount to just a few cents a share. But critics hit the FASB with force in part because any statement that tampers with their ability to flow through immediately the full amount of their investment tax credits touches a raw nerve. Exxon, for example, wrote off $259 million in tax credits last year. Companies don't want anyone fooling with that right, even a little bit.

There is also a broader objection involved. Opponents of the FASB ruling see it as just another example of the board's tendency to issue too many standards involving narrow technical issues. Accountants call the problem "standards overload," and claim they breed only costly paperwork and wasted time. "That's where all the emotions are coming in," says Ronald Wolf, Exxon's assistant controller. "They get all these little nitty-gritty things and they call them standards. But they're not standards. They're just regulations."

Those are the real-world arguments against the new rule. But companies like Exxon can't just argue for or against FASB proposals based on a desire for higher reported earnings and less paperwork. So the formal debate centers on accounting concepts.

Here, Exxon and its allies may find themselves on shaky ground. If there



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is a strong link between the investment tax credit and the writedown in the depreciable value of the assets, then the FASB's accounting changes make good sense. "The ITC and the writedown are completely intertwined," says Robert Ladig, Scott Paper's vice president for taxes. "The tax credit gives rise to and determines the amount of the reduction."

But, according to Exxon's Wolf, the only connection between the credit and the depreciation is an artificial one, imposed by Congress. That's a bit like saying the only connection between a fire engine and a fire is that they're both brightly colored.

Even though the FASB may be on high ground theoretically, it seems to be backing off. After reading the 114 letters they received over the past few months, board members are now considering demoting this ruling from full-fledged standard to technical bulletin, which carries less weight.

Score one for real-world worries over technical truth. ■

Taxing Matters

Guess which major European country has the easiest tax climate for expatriates? Bet you guessed wrong.

Her Majesty's tax haven

By Lawrence Minard

DESPITE NEARLY four years of Margaret Thatcher, the British still labor under heavy income tax burdens. The top rate on earned income has fallen, but only to 60%; interest and dividend income is taxed at up to 75%. Of a rather paltry $25,000 salary, 31% goes to the taxman.

But for Americans (or any foreigner) living in Britain and working for a non-British employer, the U.K. has become one of the world's most generous tax havens—especially when compared to other Common Market countries. That is the conclusion of Richard Citron, a bright young international tax specialist with London's big Horwath & Horwath, the international arm of the U.S.' Little Eight firm Laventhol & Horwath.

Citron's data about the way various EEC countries tax expatriates show that a $100,000-a-year U.S. executive based in Britain, married and with two children, would pay only $20,000 of his earnings to Her Majesty's taxmen. That's one-third as much as the tax bite in Denmark, and less than half the amount due in France, Germany or Italy. Thanks to Reagan's 1981 Economic Recovery Tax Act, which allows U.S. expatriates to exclude $80,000 of their earnings from U.S. taxation (the exclusion rises to $90,000 in 1985), U.S. tax owed on this income would be almost nil.

Why is Britain so generous to foreigners? The answer is part tradition, part enlightened self-interest. "Britain," says Citron, "has always encouraged foreigners to work here, especially Americans in the banking sector." Not without reason has international banking been one of the U.K.'s few healthy industries. Citron adds that before the Labour Party was returned to office in 1974, treatment of expatriates was even more lenient: Only funds actually remitted to Britain were taxed.

The secret of British tax generosity lies in the fact that Britain taxes only half of a foreigner's earnings. The U.K.'s steep domestic rates apply, but on only $1 of every $2 earned. Britain's top 60% rate doesn't cut in until income exceeds $120,000, and then the tax would be only $22,500 for a married worker with two children. (Figure another $2,000 or so for Britain's National Insurance tax.) And by using dual employment contracts (one contract for British duties, a second for duties outside the U.K.) an expatriate can exclude from British taxation not only half his British earnings, but all his non-British income.

But nothing in life is simple. There are, Citron advises, several hurdles to clear. First, only non-Brits paid by non-British employers qualify for the 50% exclusion, and then for only nine years; after that, you can exclude only 25% of your earnings. Moreover, you must make sure that your living expenses do not exceed your British salary; otherwise the Inland Revenue will tax the excess at the full rates, unless you can prove that the excess is a remittance of capital rather than income. Finally, you must convince our own IRS that you qualify to exclude your $80,000 from U.S. taxation. One way is to spend at least 330 days outside the U.S. on foreign assignment. Alternatively, you can establish bona fide residence in the U.K. by, for example, working in Britain for at least half the year. But if you can clear

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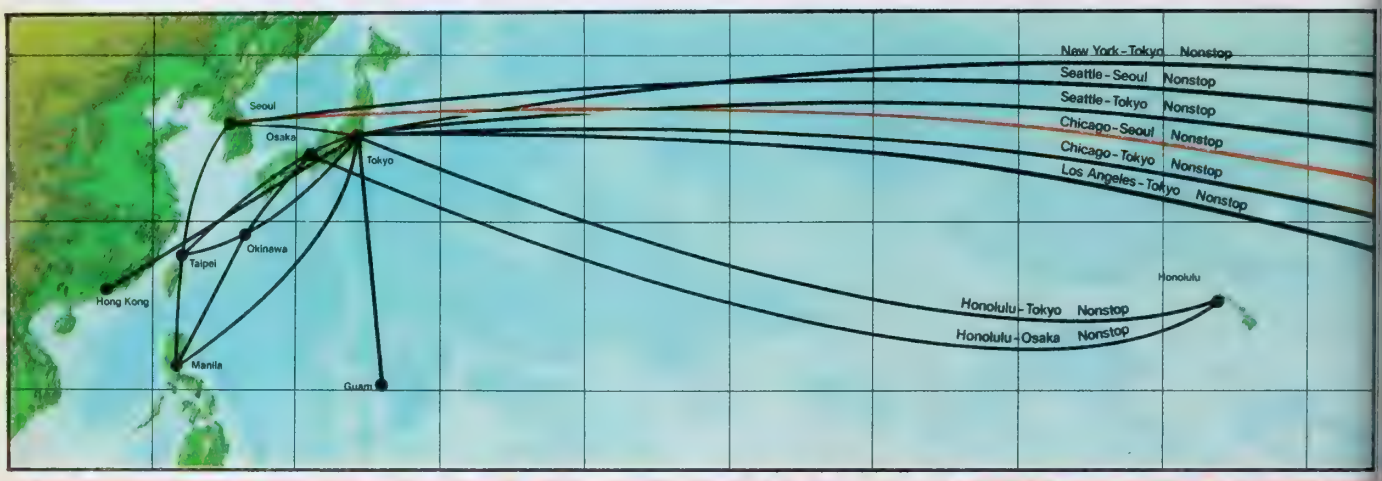

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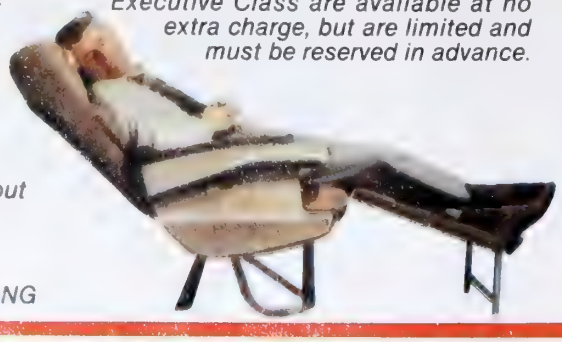

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the hurdles, says Citron, "then obviously the place in Europe to be posted is Britain."

Foiling FIRPTA

In late 1980 Congress passed the Foreign Investment in Real Property Tax Act (FIRPTA). The legislation, which was strongly supported by farmers, was intended to ensure that foreign investors pay taxes on their U.S. real estate gains.

In September the IRS released temporary regulations that sparked considerable controversy. Many accountants contend the new requirements are overly complex and burdensome. Then, just weeks ago, the New York State Bar Association tax section issued a laundry list of complaints and suggested amendments.

One problem centers on real estate holding companies owned by foreign interests. According to the IRS, any enterprise with over 50% of its assets invested in U.S. real property is considered a U.S. real estate holding company and is thus subject to taxation. The rub comes in determining the relative worth of these interests. Clever operators, the NYSBA points out, can manipulate the gross value of real estate holdings in order to keep them below 50% of the holding company's assets. Conversely, some foreign investors with interests in heavily leveraged real estate may find that a small equity investment in U.S. property is considered to have a value that triggers the regulations. They could wind up paying a sizable amount in unexpected taxes.

There are other problems, but there may still be room for optimism among foreign investors. The IRS recently postponed the date by which investors had to decide whether to file the required documents or post security. That's good news for FIRPTA's foes. After all, the next best thing to not paying taxes is putting off the due date.—**Martin Love**

Florida gambit

When the not-so-golden state of California has been forced to resort to i.o.u.s to pay its debt for the first time since the Depression, about the last thing you would expect it to do is abolish the state inheritance tax. Yet that is precisely what California has done. And it's not alone. Illinois and Wyoming have also killed off these taxes in the past ten months. Since 1979 five other states have also done away with their inheritance taxes.

Why? "The inheritance tax is simply a cruel and ghoulish tax," says Illinois Representative Penny Pullen, the driving force behind that state's bill to abolish death taxes. "It hits people in their darkest hour, when they can least afford to be harassed by the government."

Humanitarian reasons aside, there are major problems with inheritance taxes. For one thing, a family that has all of its assets tied up in a small business may be forced to sell that business to pay inheritance taxes if the head of the family dies suddenly. It's a true dilemma: You have to pay the tax to keep the business and you have to sell the business to pay the tax. Worse, under most state inheritance tax laws, the same estate may be taxed twice in the same generation—once as it passes from husband to wife, and then again as it passes from wife to children. That is so obviously unfair that California and seven other states have replaced their inheritance taxes with what is known as a "pickup tax."

These pickup taxes are levied only if the estate is large enough to incur federal estate taxes. Then the pickup taxes are set equal to the amount of tax credit the federal government gives for state estate taxes. So, the estate doesn't wind up paying any additional money to the state.

The amounts involved in the abolition of death taxes are not huge. In 1981, for example, the total death tax revenues for the state of California amounted to over $500 million, 2.4% of total tax revenues. In Illinois, that figure came to $142 million, or nearly 2% of total tax revenues. And in Wyoming, it accounted for less than $3 million, 0.6% of that state's total tax revenues.

"I wouldn't be surprised if other states have something like this in the works," speculates Robert Greisman, tax manager of Chicago's Alexander Grant & Co. It's a horse race, after all. "States are competing," says Philip Tatarowicz, supervisor at the national tax department of Ernst & Whinney. "They are enacting a variety of tax packages, maybe so people won't retire to Florida."—**Debra Rapps**

The rainmakers

Sometimes it looks as if the Internal Revenue Service were in the business of stuffing silver linings with clouds. The most recent puff of IRS nimbus comes in the area of early-payoff "discounts" on home loans. These incentives were given to homeowners who helped banks and S&Ls out of a tight spot by paying off, years ahead of time, old, low-interest mortgages.

The IRS, however, ruled last November that such discounts count as taxable income to the homeowners. To make matters worse, the ruling is retroactive. People who took advantage of these early-payoff deals, not expecting any taxation, may find themselves in debt to the IRS. Now they tell us.

Fortunately for the poor taxpayer, the retroactive element of the new ruling may be impossible to enforce. The only mechanism that the IRS has to monitor these early-payoff discounts is a formal audit. "What will happen is that for every person who is subject to the ruling, 10% will become aware, and report the income, and 90% will do nothing," says Robert Milburn, a partner at Laventhol & Horwath, the Philadelphia-based accounting firm. But even those taxpayers who are caught through audits will probably face no negligence penalties, as long as the Service does not think they have withheld any information deliberately.

The saddest news comes for homeowners who take the discounts in the future. The IRS will be watching carefully. The service will be changing its 1099 information forms for reporting miscellaneous income such as rents, royalties and other payments to include gains from written-down bank loans. So if interest rates should go up again, and you cash in on a mortgage, the IRS will be your partner.—**Desiree French**

By selling their airlines' stock, holding companies can have their cake and eat it, too. But what are the buyers getting?

Let them eat stock

By Robert McGough

When Trans World Corp. sold 19% of its troubled subsidiary, TWA, in February, Wall Street was rife with speculation. Was Trans World making the asset play that Odyssey Partners, large shareholders, tries occasionally to force on it—a breakup of the holding company into its valuable constituent parts? Probably not. Breakup seems very far from management's mind.

Since then Texas Air's subsidiary, Continental Airlines Corp., has announced a similar offering of stock. Whereas Trans World has profitably diversified operations, Texas Air has nothing to fall back on besides airlines—New York Air and Continental, which also owns Texas International. Both Trans World and Texas Air swear they aren't splitting up. Trans World CEO L. Edwin Smart calls it merely "a significant source of capital for TWA." What's going on?

Both companies are making an asset play, but a clever one that keeps the benefits of consolidation. Trans World and Continental are having their cake and eating it, too.

The key element in these deals is that, for full consolidation of a subsidiary's financials, the IRS looks to the percentage of voting control a holding company has. That percentage can be quite different from how much common stock it owns. Take the TWA offering, the first time its common has been publicly traded since Trans World Corp. was formed on Jan. 1, 1979. Trans World sold 1.85 million of its 28 million shares, and TWA sold 4.15 million, bringing Trans World's holding down to 81% of outstanding common. TWA thereby raised more than $54 million for new equipment and efficient Boeing 767s—badly needed by TWA, which, with a flock of ancient 707s, has the oldest of the major fleets. Trans World itself got a tidy $24 million, too.

But Trans World isn't giving away too much. It retains full control of 10 million shares of TWA preference stock. Each preference share has ten votes toward electing the board of directors. Although the public paid $78 million to own 19% of TWA, Trans World still has 95% of the voting control. Similarly, Texas Air owns enough preferred stock that it would retain control even if Continental sold several million shares of common stock to the public.

TWA CEO L. Edwin Smart
Letting the public take the risk.

Both airlines carefully guard their preference stock. Legally, the airlines can sell none of it without selling all of it in one lump. If the holding company sells more than 50% of the common, the preference stock's voting rights evaporate.

But that leaves plenty of room to raise capital. Should Trans World decide to go whole hog and sell all the remaining TWA stock in treasury, it could raise an additional $275 million at recent prices. With 84% of the votes for directors, Trans World would retain voting control and tax benefits—80% is the IRS minimum. Continental could sell nearly half its authorized common, and Texas Air would still retain control. And the holding companies would have raised all this equity capital without a cent of equity dilution for their own shareholders. An asset play, indeed.

But what is the public buying?

The numbers are pretty dreary all over the industry, yet airline stocks have more than doubled since their lows early last year. Fuel prices are going down, and American Airlines' attempt to bring some sense back into air fares has encouraged investors, though Pan Am's discounts may have taken some of the edge off that.

A rising tide, the saying goes, carries all ships. TWA sold easily at its initial $14 a share, and has risen to a little under $16. Despite the runup in airline stocks, there are those, such as Marc Klee of the National Aviation & Technology Fund, who believe the best is yet to come. "It's ridiculous" to think airline stocks have peaked, he says. "They are priced at 60% to 70% of fair value." TWA's old, inefficient fleet isn't as much of a drawback now that fuel prices are in decline. With a debt-to-equity ratio of 2-to-1, maybe it's a good thing, analyst Eva Holman of Donaldson, Lufkin & Jenrette points out, that TWA didn't buy new planes at the same pace as some competitors. The additional debt, she says, "would have destroyed the company."

Still, following such a big runup, are airline stocks a buy? And are strapped companies like TWA and Continental the best way to play? "We weren't in the TWA deal, so I didn't have to face that one," one analyst says wryly.

TWA has lost money since deregulation, hitting a low last year when it lost, pro forma, $1.14 a share. On Dec. 31, 1982 current liabilities exceeded current assets. Continental is even deeper in the hole, with debt-to-equity a frightening 9-to-1.

Asked about the deals, airline analyst Robert Joedicke of Lehman Brothers Kuhn Loeb says, "You're getting into areas with all the caveats for certain types of accounts. Neither [TWA nor Continental], obviously, is suited, except for venture-oriented or at least businessman risks." Of airline stocks in general, Joedicke says, "This is not a group for ERISA accounts."

In the first three months of 1983, airlines raised over $1.3 billion, more than in the previous two years combined. "Everybody's going through the window," Joedicke says. Maybe the window won't close soon, but the issuers aren't willing to take that chance. They would rather let the public do it. ■

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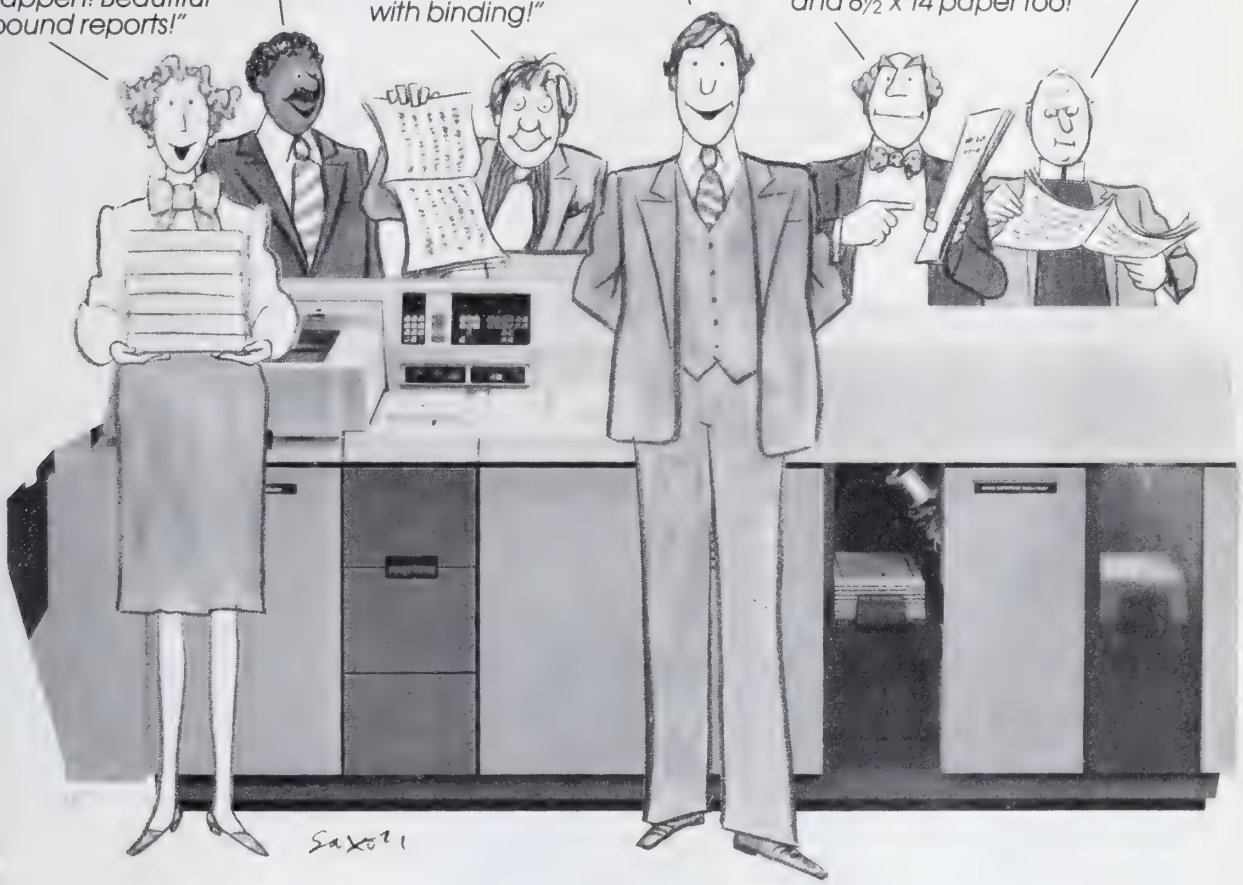

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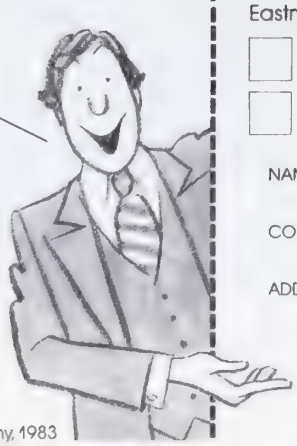

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When Britain banned a book that exposed some embarrassing secrets of the Security Service, the government turned A Matter of Trust *into . . .*

A circus

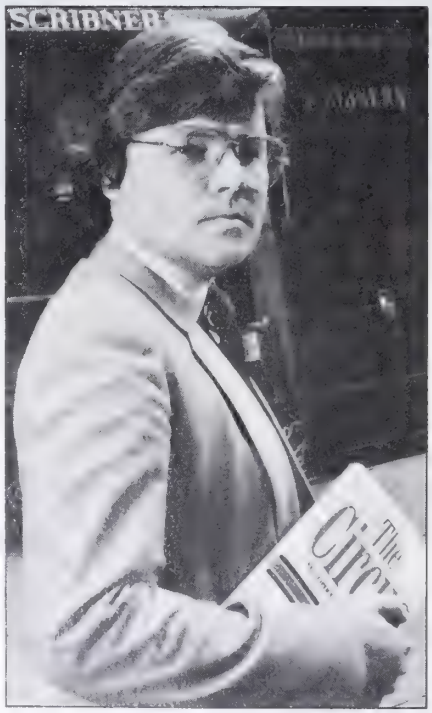
By Donald Moffitt

LAST OCTOBER in London, legal lightning struck 31-year-old Rupert Allason. Under the pseudonym Nigel West, Allason had written but not yet published a book called *A Matter of Trust*, a history of MI5, the British counterintelligence agency from 1945 to 1972. A copy of the manuscript found its way to MI5. Britain's attorney general quickly persuaded the High Court of Justice to enjoin publication. A government affidavit asserted the story told by Allason (West) could only have come from MI5 officers and dealt with "incidents, operations, investigations and other matters which have not previously been made public."

A few months later, after Allason agreed to deletion of a few names and specifics dealing with Soviet spies roosting at the "top of the intelligence tree" in Britain, the book was published. The intervention of Her Majesty's government had struck Allason with literary as well as legal lightning. Thanks to the publicity, the book has become a bestseller in Britain. Now, as *The Circus*, the exposé has just appeared in a less censored American edition. Allason has been traveling about the States promoting it.

In New York, over drinks in a Chinese restaurant, Allason told FORBES just why his book has rubbed governmental readers raw: The diligent reader can ascertain that a former director-general and deputy director-general of MI5 were the subjects of investigation as possible Soviet "moles." Since the end of World War II—in which, incidentally, MI5 performed superbly—the agency appears to have protected far more Soviet agents than it ever caught. It did, in fact, according to Allason, uncover on its own only one small-fry spy during the entire postwar period. Meanwhile it failed to uncover and quite possibly even warned those high-placed British Foreign Service officers and others who constituted the most intellectually distinguished ring of traitors in history: Guy Burgess, Donald Maclean, Harold (Kim) Philby and John Cairncross.

Four members of what the KGB calls the "Ring of Five." And who was number five? There are many candidates: British governmental and business institutions seem to possess a real genius for turning out spear-carriers vulnerable to the promise of a KGB commission, a few pounds or the intimacy of one sex or another in "honeytrap" stings routinely arranged by the KGB. Once compromised, most of the KGB's British subjects more or less promptly and patriotically reported in to MI5, which assigned them professional case officers to control their spying for the Soviets. That, as it turns out, is precisely what the KGB expected all along. Once having learned the identities of the case officers, the KGB then made overtures to them—the true targets. Belatedly, MI5 learned that at least five of its case officers had been approached by the KGB. But not one—for fear of revealing that his cover had been blown—ever reported the matter to a superior. How many British intelligence agents the KGB actually "turned" is guesswork, but Allason believes that there were many more than five.



Rupert Allason a.k.a. Nigel West
Tracking the KGB's moles.

Allason readily concedes that all the world's intelligence agencies occasionally get penetrated by their opponents. William Hood, a former CIA counterintelligence officer, once said, "Any intelligence officer who assumes his service is penetration-proof is ignorant of intelligence history."

But the British record, Allason says, is simply abysmal. Why? Allason, Rebecca West, John le Carré (himself, as David John Moore Cornwell, of MI5) and other British writers and intellectuals have grappled with the question over the years. "Peacetime" espionage in Britain is far from a capital offense; when one spy was sentenced to 42 years (most get off with single-digit terms) his punishment generally was thought excessive. That leniency, however, merely reflects values of the British elite. One theory has it that such elitists as Burgess, Maclean and Philby, mourning the decline of the Empire of their youth, found in the Soviet Union their new Empire and their rightful place in it. Another theory traces the treason virus to the contempt, among certain Britishers, of all things American, particularly America's relatively classless egalitarianism; in the Soviet Union, by contrast, workers have their place, elitists have theirs, and the mannered, disguised British contempt of one class for another does not exist. Russians may be cynical about their rulers but hardly hate them.

And as cynical as the Soviets are toward their own burdened and belabored system, they are not stupid. The ease with which they have manipulated the wealthy and privileged in British society provides evidence enough of that. Allason is giving us a lesson, and it's simple: Never underrate the other guy. ■

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Harris Corp. knows a lot about words and it knows a lot about technology. Nevertheless, moving into the office automation business won't be easy.

Harris Corp.'s bold strategy

By Pamela Sherrid

"WE KNOW MORE about word processing than anyone else in the world," said Dr. Joseph Boyd, chairman of Harris Corp., in the spring of 1981.

But there's many a slip between cup and lip. It's two years later, and Harris' first office word processor, promised since the late Seventies and a cornerstone in the Florida-based company's long-term strategy, will only be introduced next month.

Though late, the timing coincides neatly with another Harris good-bye nod to the old-fashioned printed word. The company, which had sales last year of $1.7 billion, is in the process of selling its printing-press division to a group of employees for $250 million. With that divestiture, Harris loses its oldest and largest business, completing its transformation from mechanical printing supplier to a producer of high-tech electronic systems.

Harris made the transition by building from its defense business (FORBES, *May 26, 1980*) and excelling with high-tech, top-of-the-line products in smallish, specialized markets. Its wares include satellite earth stations, scientific super minicomputers, specialty semiconductors and sophisticated control systems. That mix produced six years of uninterrupted 19% annual earnings growth, until the fiscal year ending last June. In the last twelve months, profits fell 33% to a five-year low of $62 million. Blame the recession, new competition and high development costs.

What works for a small company doesn't necessarily work as well for one with annual sales—even without printing—of over $1.3 billion. To avoid slowing its growth, Boyd must broaden Harris' markets. Thus the risky entry into office automation.

Dr. Joseph Boyd of Harris Corp.
Learning to go out and sell.

This move will be especially tricky. Harris is a company dominated by engineers—like Boyd, an electrical engineer from the University of Michigan—whose specialized, state-of-the-art products have almost sold themselves. "Now Harris will have to go out and sell," says Stephen McClellan, a Salomon Brothers analyst.

As Boyd knows, simply having the best products isn't enough. Take his semiconductor business, which lost $11 million pretax last year on sales of $147 million. Harris, one of the nation's top dozen chipmakers, got into trouble when its CMOS line (a low-power technology that lets designers pack more circuits into less space) became too popular. The Japanese muscled in with a CMOS memory circuit as the recession hurt demand, and prices tumbled 80%.

The recession also hurt Harris' minicomputer business, and telecommunications sales slowed when oil-producing countries stopped buying. But these problems didn't change what Boyd has identified as his major thrust for the next decade. This is what Harris dubs "functional integration," helping computers and word processors talk to each other efficiently.

That's why the company's botch-up with its soon-to-be-launched word processor is so unfortunate. Harris was a pioneer in newspaper composition systems, and it seemed natural for it to transfer its printing knowhow to office automation. Harris even went so far as to demonstrate a mock-up of a word processor to security analysts two years ago before admitting that its approach had to be junked and starting again from scratch. "Top management didn't listen to repeated warnings from marketing people that the project was in trouble," says a former employee.

By now, of course, IBM, Wang and DEC have consolidated their positions in the sale of word processing equipment to major corporations—the same market Harris is now entering. Moreover, though the Harris machine has some computing capability, many office automation experts think word processing customers will eventually opt for a combination of inexpensive personal computers and general purpose minicomputers sporting improved multipurpose software. Harris' minicomputer is geared to scientific applications, which means the company doesn't have a large installed base in the front office.

What happens if Harris' word processors fail to capture a significant portion of the market? The company's future is not at stake. Its defense business in such gadgets as supersecure communications systems and avionic test equipment is expected to churn out 25% earnings increases for the next several years. And a semiconductor turnaround is likely. This summer Harris will introduce the first CMOS version of the popular Intel 8086 microprocessor that is used in many personal computers. Looking further, a new domestic telecommunications market may help offset Harris' international problem: private networks for corporations that combine Harris' satellite, microwave and fiber expertise. "Few corporations have as wide a capability for voice and data communications," says Sandra Roth, a telecommunications analyst at Shearson/American Express.

But without a successful word processing product, Boyd's bid to broaden the company's markets will be set back, and that will make the difference between spectacular and merely impressive growth in the future. ■

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Ford's 1983 new car blitz isn't your usual hyped-up introduction. There's lots more at stake than simply a few new models.

Make or break

By John R. Dorfman

STEP BACK TO 1958. Ford Motor Co. needs a car for those who want something other than basic transportation but can't afford real luxury. Mercurys are doing all right with well-to-do buyers, while Fords continue to sell to customers at the low-cost end. But in the middle the company is weak, so it spends several hundred million dollars to bring out . . . the Edsel. Selling a pitiful 41,000 cars in 1959, the new hope goes down in the books as a classic business blunder.

Let's face it. Middle-market cars have often been Ford's Achilles' heel. In the 1960s Ford's Fairlanes and Torinos were no match for General Motors' intermediates like the Chevrolet Chevelle and the Pontiac Tempest. But who cared when Ford was piling up profits selling thousands of Lee Iacocca's brainstorm, the hot little Mustang?

Now it's 1983. Déjà vu. Ford's middle-market models, cars like the Fairmont, Thunderbird and LTD, have again been getting creamed by GM. Ford is selling small cars right and left. But that's nothing new. The bottom of the line was Ford's strength even in the 1920s. Remember how Henry Ford kept grinding out Model Ts while GM captured the public's fancy with more luxurious models?

Today, Ford's bottom-end strength avails it little. A worldwide overcapacity to produce small cars has eroded profit margins badly. So this year Ford has spent close to $2 billion to shore up its position in the middle of the market. The stakes are even higher than in 1958. If the company's new Tempo and Topaz don't catch on, Ford may have to sell its profitable aerospace subsidiary. It may have to scale back sharply on its U.S. operations. It will certainly have to ask for mercy from its banks.

Volume, of course, is still the name of the game when it comes to making cars. Fixed charges loom so large that producing 400,000 Thunderbirds doesn't cost anything near four times as much as producing 100,000. High market share means long production runs, and long runs are vital to profitability. Ford's current problem is that it has a shrinking share of a shrinking domestic segment of a shrinking U.S. auto market. It controlled nearly 24% of that market in 1978 but less than 17% last year. Worse, Ford's share was concentrated mostly in the least profitable models.

Despite continued strength abroad and in trucks at home, Ford's inability to make money in the domestic auto business has hurt its balance sheet

Ford Chairman Philip Caldwell, with a
The company has been strong in

badly. Working capital is now negative, a serious sign, according to A.G. Becker auto analyst Alfred Nelson. He thinks a healthy auto company should have net working capital equal to at least 5% of sales. Ford hasn't been above that benchmark in some time. As a result, Nelson contends that Ford is currently a riskier investment than Chrysler: "Ford now has to say to its suppliers, 'I can't pay you in 30 or 60 days like I used to. You've got to stretch out.' Starting from the time it went public in the mid-1950s, Ford has never had negative working capital, until now."

The profit picture isn't pretty either. Ford lost $1.5 billion in 1980, $1.1 billion in 1981 and $658 million last year. Ford's long-term debt is reasonable, but the company has an embarrassing $2.2 billion in short-term debt. To conserve cash, dividends were cut in 1980 and eliminated altogether in 1982.

It is little help that Ford's Escort, a subcompact, is the bestselling car in the U.S. and in the world. U.S. manufacturers can't make money on small cars. "It's tough to make a buck on an Escort, even if you sell them like popcorn," says Maynard (Mac) Gordon, editor of an auto industry newsletter.

bird, near Ford's world headquarters in Dearborn, Mich.
abroad, but weak in the area where it began—cars for the American market.

Taking overhead into account, Ford didn't make a penny on the nearly half-million Escorts, Lynxes and sports car derivatives it sold in the U.S. last year.

The reason is that Japanese manufacturers effectively set the price. With a substantial cost-of-production advantage—probably more than the commonly cited $1,500 per car—they can make money selling small cars at prices that force U.S. producers to take losses. It's an old story: To the low-cost producer belong the spoils. Still, Ford's Escort and its companion Mercury Lynx are well-designed cars—and proof that Ford still knows how to design and sell a good piece of machinery. Moreover, the cars are important for Ford's dealers. Better to have people trade up from your loss leader than somebody else's.

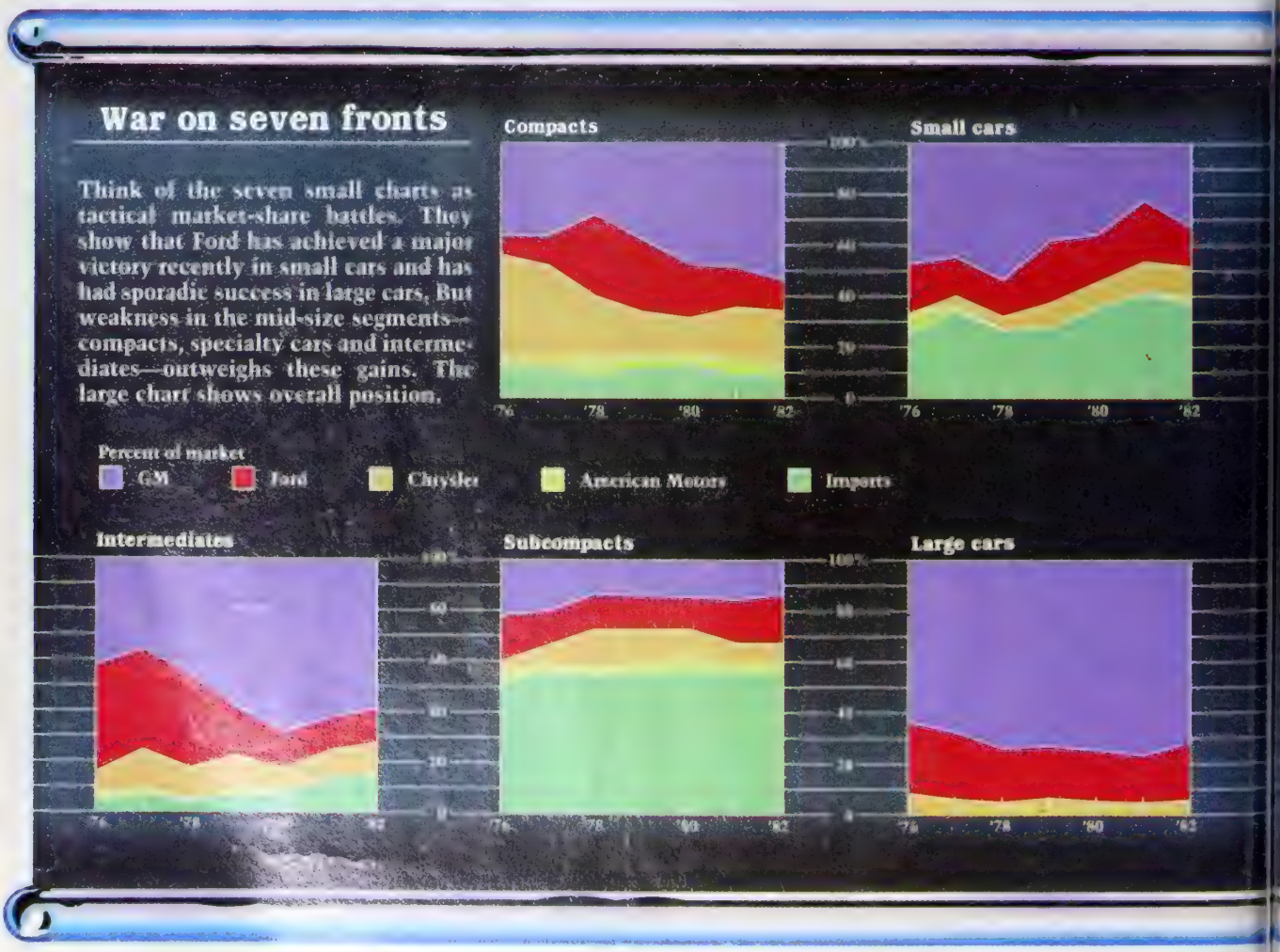
While it struggles at home, however, Ford is doing better than ever abroad. "Our market share in Europe reached a record 12.4% last year," says Chairman Philip Caldwell, who headed European operations for Ford from 1972 to 1973. "In Latin America we had leadership in trucks and gained share in cars. In Australia we had car and truck leadership for the first time since 1948." Ford earned $613 million around the world last year, but all those profits, and then some, went down the drain in the U.S.

What has Ford done right abroad that it has not done right at home? Caldwell answers the question indirectly by ticking off factors that have made the U.S. a lousy place to build and sell cars in recent years. Start with fuel economy. Europeans were used to $2-a-gallon gasoline, while Americans for years were used to paying 30 cents. "Europe never had the biggest cars," Caldwell points out. "During the 1970s there was very little movement from one size segment to another."

In addition, regulation in Europe tends to work according to government-industry consensus. Caldwell describes the U.S. system as "more nearly heavy-handed." Then there's trade policy. Fortunately for Ford, its foreign markets are largely protected. Quotas and tariffs do the job in Europe, while local content laws are the rule in Latin America. The company escapes these because it *is* a local producer. U.S. trade barriers, however, are so slight as to be an invitation for foreign competition. "Here the Japanese put pressure on profits at the low end of the line," Caldwell says, emphasizing the obvious. "There was a large rise in imports at the same time that there was reduced total demand because of the recession."

The recession helps explain why Ford has been losing money. But it doesn't explain why the company has been losing market *share*.

Here, Donald Petersen, Ford's genial-looking president, is quite outspoken. "In the late 1950s and the 1960s," he says, "we were doing things before General Motors. We produced the first superior station wagons. Sporty cars at a friendly price. A semi-luxury sports car. Retractable hardtops. But our leadership has waned in the last ten years. In the era of regulation we took our eye off the competitive ball. In cars, not in trucks. We have the finest trucks you can buy. But in cars, we drifted away from being the company that was offering things first."



Ford's strong truck business has indeed helped cushion a decline in domestic cars. The company's F series light trucks and Econoline vans lead their markets with fat 40% shares, and the new, compact Ford Ranger is coming on strong against popular Japanese models. "What's been holding Ford together is trucks," says Mac Gordon. "They carry the mail because they're high-profit, big-ticket items. No one dickers on trucks."

Lately, in fact, fully 39% of Ford's unit sales have come from trucks, compared with about 22% at both GM and Chrysler. By revenues, trucks are 40% of Ford's show. Without them, the domestic red ink would have sunk Ford. Without trucks and without foreign profits, Ford would have been Chrysler—or worse.

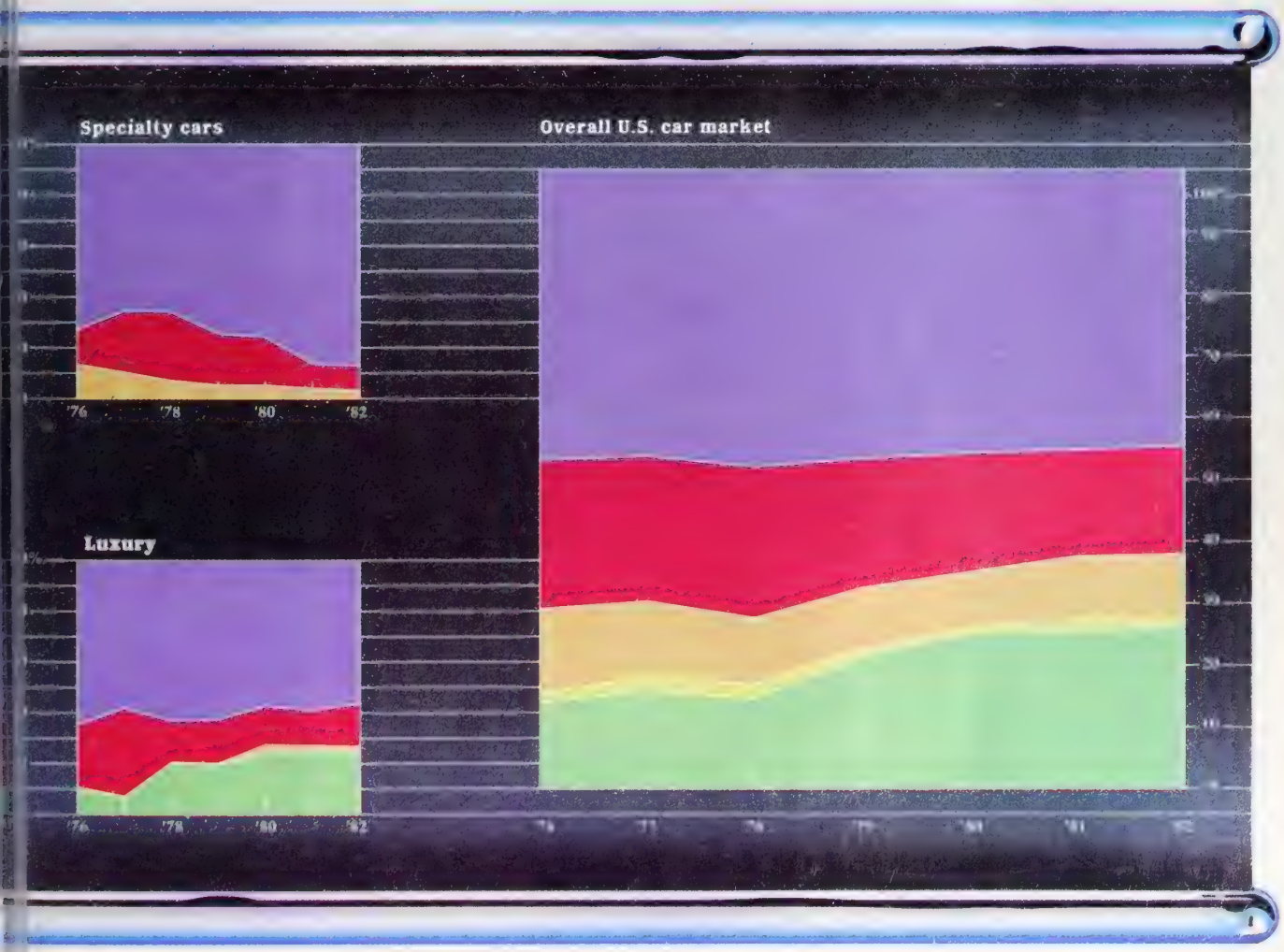
Profitability at Ford, then, depends on building its presence in the middle of the car market. But in recent years the company has made some serious blunders there. When fuel economy became a big issue, for example, both GM and Chrysler beat Ford to the punch in downsizing bigger cars. Ford also was slow to introduce front-wheel drive and drifted toward unpopular boxy styling. In addition, the company trailed GM in bringing out wagons, sports cars and optional engines to go with its basic models. Ford was slow off the mark. There's no other phrase for it.

"It's tough to make a buck on Escorts even if you sell them like popcorn," points out Mac Gordon. Ford has yet to make a penny on them.

To make matters worse, Ford got stuck with a reputation for indifferent quality—a reputation that rust problems and Pinto litigation did little to enhance.

In 1981, while Ford was reeling under the effects of these problems, its U.S. market share hit a low of 16.6%. That's when GM could have stomped on its fallen competitor. But GM blew the opportunity. Its J cars, intended to turn back Japanese compacts, were underpowered and overpriced. In design, they had little that seemed new, and sales were sluggish. GM's next try was the slightly larger, more luxurious A car, positioned to recapture sales from European competitors like Audi and Saab. Again, the public yawned. To make things worse, GM's alphabet-soup model names hammered home the point that there is now little difference among Chevrolets, Pontiacs, Buicks and Oldsmobiles. If Ford was slow, GM could only be clumsy.

Given this second chance, Ford managed to inch its 1982 market share up by 0.3%, while GM's fell by 0.4%. That's a more significant feat than it might appear. Ford was holding its own despite a lack of new product. "Last year," says Harold Poling, "GM introduced three all-new products—effectively nine [because each design was produced in Chevrolet, Pontiac and Buick versions]—and they lost market share. This year *we* are introducing major new products,



ten new cars and trucks, culminating May 26 with the Tempo/Topaz."

The Tempo and its Mercury twin, the Topaz, are small family cars that will compete against GM's X and J cars and Chrysler's K cars. They replace the aging, rear-wheel-drive Fairmont (and Mercury Zephyr), which accounted for 32% of the compact-car market back in 1978 but only 13% last year.

The top 20% of the market can be even more profitable, and Ford is doing reasonably well there. The full-size Ford Crown Victoria and Mercury Grand Marquis, which the company had planned to phase out, refuse to die—encouraged in good part by declining gasoline prices and lanky American bodies.

That's good news for dealers, who enjoy about a 19% markup on big cars, vs. 11% on small ones. In addition, big-car buyers are likely to pour on the accessories, which carry a dealer markup of up to 25%. A sweet point for Ford is that the tooling on these five-year-old models is already paid for. Each sale here clinks right down to the bottom line. Ford's restyled Lincoln Continental also picked up market share last year, mainly at the expense of GM. All fine, but big cars are only 20% of the total market, and that segment is shrinking in the long term.

"What's been holding Ford together," notes an industry observer, "is trucks. They carry the mail because they're high-profit, big-ticket items."

Scan the marketplace, then, and what you see is this: Ford has been gaining lately in both small and large cars. But the company is woefully weak down the middle. The Fairmont nose-dived after a good start in the compact market. Thunderbird's market share is down sharply. And Ford's intermediates like the LTD have fallen from 42% of market in 1976 to less than 14% last year. People seem to love Ford's loss-leading Escort, but they're trading up to GM.

So, bolstering the middle is essential—and Ford simply can't afford another failure. Though the company has just introduced sleek new Thunderbirds and revamped LTDs, the Tempo and the Topaz are the real keys to Ford's future. They will be launched with a major promotion campaign, and Ford executives are wild about their prospects. "I would expect to see Tempo become the bestselling car," says Harold (Red) Poling, head of Ford's North American operations. Does that mean bestselling in Ford's line? "No, in the U.S."

With curved, aerodynamic lines, the Tempo bears considerable resemblance to the Sierra, Ford's hit model in Europe. Why not just import the Sierra? For several reasons. Among them: The Sierra is smaller than the Tempo, and it has rear-wheel drive. Americans seem to prefer front-wheel drive in smaller cars. In addition, as Ann Knight, an auto analyst for Smith Barney, points out, the UAW would have a fit if Ford imported the Sierra in quantity. Look for Sierras to be brought in as high-price sports cars, even though in Europe they are avail-

Where Ford beats GM

Not many people realize that Ford is the third-largest auto producer in Europe, behind Renault and Fiat and ahead of Volkswagen and General Motors. Ford is, in fact, the world's largest seller of cars outside its home country. The chart shows relative market strength for major producers around the world.

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The Tempo gives Ford a new crack at the portion of the market where it has been weakest. If overall auto sales rise nicely, as many analysts expect, Ford could earn around $800 million next year. That's $6.66 a share, if the optimistic predictions hold up.

This improvement is possible because the company has dramatically lowered its break-even point without sacrificing much capacity. "Worldwide the last three years we cut almost $3 billion from our operating costs," says Caldwell. Ford can now break even at around 2.5 million vehicles, compared with around 3.5 million a few years ago.

Such efficiencies have not been achieved without pain: About 30% of the North American salaried staff was let go, and some 47,000 hourly workers are on indefinite layoff. Others have accepted pay freezes and benefit reductions to help ease their employer's cash strain.

Since 1980 the UAW has been helping Ford in another way, by cooperating in an "employee involvement" program. Workers have been meeting with managers in small discussion groups, Japanese style, to solve problems and offer suggestions. (Not coincidentally, Ford has employed W. Edwards Deming, an expert on Japanese production methods, as a consultant.) Hundreds of worker suggestions have been incorporated into Ford's new light truck, the Ranger, in the Thunderbird and in the Tempo.

All this is quite a change for Ford, which for years had a reputation for terrible labor relations. As a plant official in the Midwest recalls, it was only a few years ago that "we wouldn't tell the union people what our schedules were until one week in advance." Now the same plant official finds his union leaders to be "pretty much committed" to a cooperative effort.

Worker involvement has helped Ford achieve a remarkable improvement in quality. In its advertisements, Ford cites surveys showing a 59% quality improvement since 1980. Ford claims its quality is now 12% better than GM's and 24% better than Chrysler's. Significantly, those companies have raised no strenuous objection.

> "A few years ago," one plant official says, "we wouldn't tell the union our schedule until one week in advance."

Ford officials, however, clam up when asked for the comparable numbers vis-à-vis foreign competitors. They will say only that the company is about even with Datsun and Volkswagen and still behind Toyota, but gaining. Says Richard Wagner, a Connecticut dealer who also sells Datsun and Peugeot: "The Ranger and the Escort are the finest cars I've ever seen from Ford Motor Co. They are very close to my Datsuns in quality."

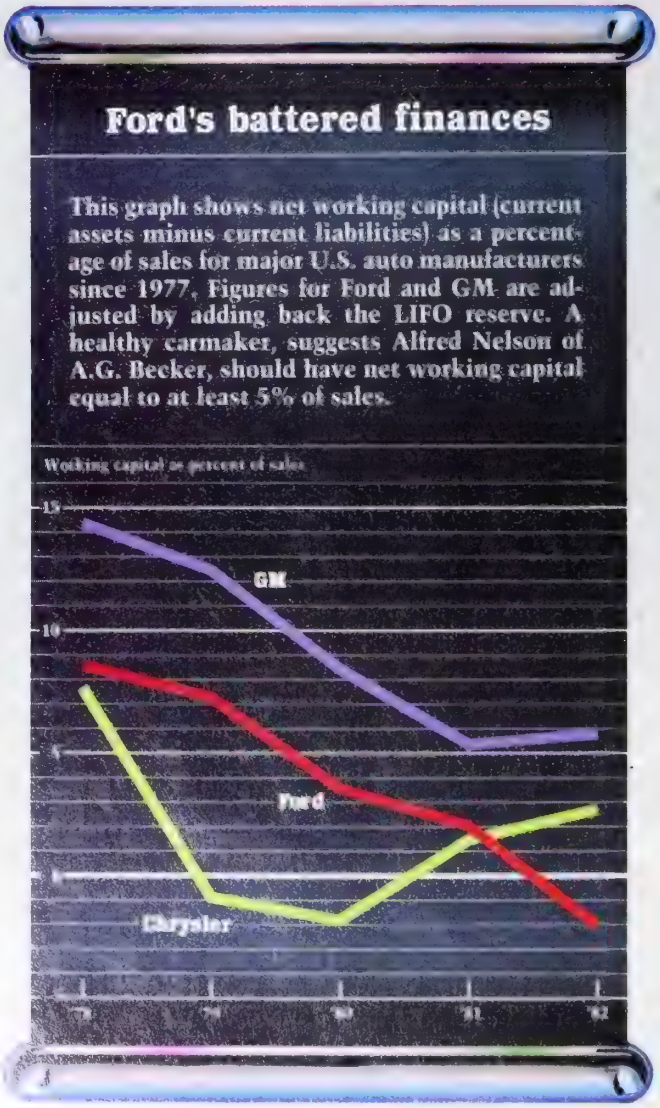
Ford is also marketing aerodynamics. From Caldwell down, Ford officials claim they have captured the lead in this area, and outsiders tend to agree. The average drag coefficient of Ford cars this year is about 0.40, vs. 0.51 in 1977. The lower this measure of wind resistance, the better the fuel economy. The slickest car on the road, the Audi 100, scores 0.30. Ford's new Tempo scores 0.36 in a two-door version, 0.37 in four-door. At 0.35, the Thunderbird does even better.

Will sleek styling, improved quality, a flurry of new products and an improved economy get Ford back into the black? One thing is certain: The company can't depend forever on blunders by its competitors. GM isn't known for repeating its mistakes. And the big carmaker has the capital to keep trying. Chrysler, meanwhile, is doing an ever more impressive job of moving into the profitable middle-market segment, where Ford's success is essential.

At a time like this, management stability would be an asset. Though Phil Caldwell has been chairman since 1980, it's widely believed that Henry Ford II, 67 and still chairman of the finance committee, can force a management change whenever he wants. The Ford family owns 40% of the voting shares, worth $500 million, and abrupt changes of top executives have been a tradition.

With Caldwell scheduled to retire in two years, speculation lately has focused on two possible successors—President Petersen and Executive Vice President Robert Lutz, who is fresh from a resounding success in Europe. But it's a common joke around Detroit that Ford is full of executives "who were geniuses in Europe. But something seems to happen to their brains when they cross the Atlantic."

Chrysler has squeaked through brilliantly. GM is moving more confidently now. For 1983, all eyes are on Ford. ■



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ONE COMPANY IS HELPING TOMORROW DAWN TWICE IN THE SAME SKIES.

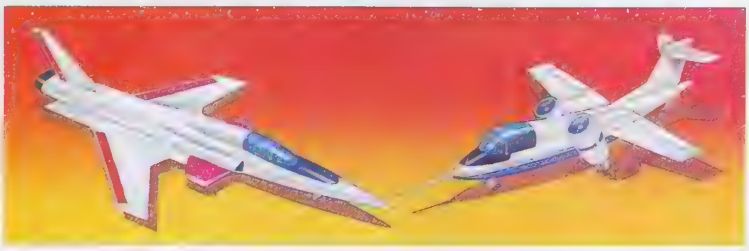
THE COMPANY IS GRUMMAN.

In wind tunnels and on test stands, new Grumman aircraft are helping move the future of flight into the present in two different ways.

The first, called Design 698, will take off and land like a helicopter and fly forward with the speed of a plane. With two turbofan jet engines and nacelles that tilt for hover, transition, and conventional flight, it will be able to operate from postage-stamp airfields as well as Navy cruisers and destroyers. Now that five thousand hours of wind tunnel testing—as well as simulators and radio-controlled models—have proved the validity of Grumman's V/STOL technology, the next step is a manned flight demonstrator.

With Grumman's leadership reputation in lightweight, super-strong composite materials, we're also designing and testing an aircraft with wings that sweep forward instead of back. Known as the X-29A, this innovative plane will do a lot more than demonstrate a broad range of advanced technologies. It will reduce aerodynamic drag, improve fuel efficiency and, with its lighter weight and greater maneuverability, will reach a new plateau for high performance aircraft.

Providing tomorrow's aircraft with capabilities like these requires a host of technologies, many of which can be seen in the tactical aircraft Grumman produces today—the F-14, A-6E, E-2C, EA-6B and EF-111. So whether it's keeping today's aircraft preeminent or making tomorrow's unmatched, we have the technology for the job at hand.



THE TECHNOLOGY FOR THE JOB AT HAND.

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CHEVROLET CAPRICE. ONE OF THE "TEN BEST CARS." FOREIGN OR DOMESTIC.

Car and Driver, Jan. '83

Car and Driver magazine considered all the cars you could buy this year, foreign or domestic. Then they narrowed them down to the Ten Best Cars.

Only one full-size car made the list.

It was not a $30,000 import, it was not a $20,000 luxury car.

It was a Chevrolet. Our 1983 Chevrolet Caprice Classic.

Compare Caprice with any other car, large or small, foreign or domestic. For the six-passenger room you want, the comfort, the trunk space, the ride, the quietness, the secure feel behind the wheel.

For what you want in a new car. And for what you're asked to pay.

We think you'll agree with the editors of *Car and Driver*. And with the millions of owners who, for the past 12 years, have made Chevrolet the best-selling full-size car.

You can spend more.
The question is, why?

Find out for yourself. At your Chevrolet dealer's.

Caprice Classic Sedan.
From America's sales leader.

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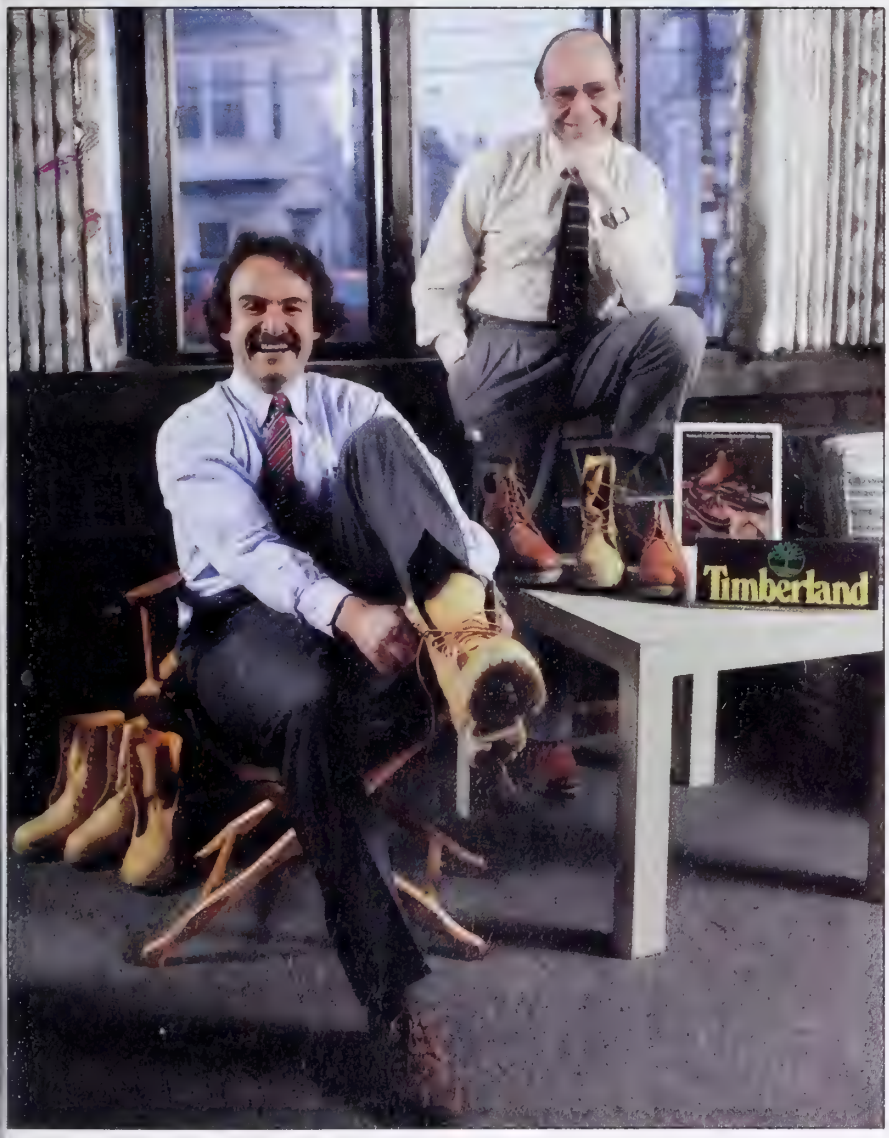
Let's get it together... buckle up

Timberland has turned work boots into high-quality footwear that is selling at Saks.

Betting the company



Timberland's Sidney and Herman Swartz
Government-issue grace with a Fifth Avenue price tag.

By Stanley W. Angrist

HERMAN SWARTZ, 55, and his brother, Sidney, 47, had a leg up in the boot business. Not having attended graduate business schools, they did not know that you never, but never, risk your corporate existence on a single product. But that's what the Swartz brothers did, although they will not admit it in so many words. The gamble they took has turned old Abington Shoe, a down-at-the-heels maker of men's shoes, into Timberland, producer of a tough and durable work boot that, despite its government-issue grace and elegance, has clodhopped its way into the consciousness of outdoorsmen around the country.

Timberland, in Newmarket, N.H., will sell about 1.8 million pairs of boots this year for $70 million, of which the company will keep, before taxes, $9 million or $10 million. In the early 1970s Timberland (then Abington) was selling 400,000 pairs of shoes a year, and the Swartzes were happy when they earned a dime a pair.

Nathan Swartz, their father, bought Abington Shoe in 1955. His then-youngish sons joined the firm the same year. Even then, making shoes by hand-stitching soles to uppers was becoming expensive. The art of stitching was dying along with the stitchers themselves. Joining soles with uppers by injection molding, a process that binds the parts together without stitching, was cheaper, but it also produced low-quality shoes. The Swartzes chose to switch to injection molding. But they discovered that there was no reason injection molding had to produce cheap footwear.

About the same time, the Swartzes happened on an insulated and waterproof boot, made in Canada and distributed in the U.S. by Dunham, another old shoemaker, in Brattleboro, Vt. The Swartzes liked the boot, and decided that they could make one like it but better, with injection molding of especially high-quality materials. The Swartzes persuaded Goodyear to make a new synthetic sole material of exceptional durability. Their father, a Russian immigrant who had started in the U.S. as a stitcher, came out of retirement to design the boot. They set about manufacturing it by injection molding, a process that squirts a rubberlike compound into a mold for a sole that chemically bonds itself to the leather upper.

The first few Timberland boots

were made in 1973, and in 1974 the firm produced 5,000 pairs. The boots were an instant success. Stores such as Bloomingdale's, Saks, Lord & Taylor and Bergdorf Goodman ordered Timberlands. By 1975 production had risen to 25,000 pairs. This year's 1.8 million pairs will retail for $70 or $80 each. The boots hardly appeal to the price-conscious, but their durability sells. Timberland, meanwhile, has exploited its brand with a line of boat shoes, which competes with Stride Rite's popular Top-Sider, and a line of hand-sewn moccasins. Unit sales of the new lines should equal or exceed Timberland's boot sales this year.

Herman and Sidney give full credit to Len Kanzer, president of Marvin & Leonard Advertising Co., Boston, for the idea of marketing the Timberland Boot as a fashion item. For a company that had invested practically nothing in advertising and had sold its unlabeled products to Army-Navy stores, the idea was radical. But the brothers wound up buying advertising in the *New Yorker* magazine. In conceding their unlabeled business to even cheaper imports from Taiwan and elsewhere, and in financing production of their new brand, the brothers put the future of the company on the line, and won.

Timberland's success has changed the company. It has not much changed the Swartzes. The brothers commute every day from Boston in a Mercedes instead of their old Plymouth, but they still live in their same suburban homes and tuck part of their pay away in savings. "Once you have achieved a reasonable standard of living and met your financial needs," Herman says, "making your business grow becomes a little bit of an ego trip. And we wanted to make a better boot than anyone else." ■

The Up & Comers

Psych Systems has an unusual product in psychological testing. And its president seems to have enough self-knowledge to know when to step down.

"We've taken our own tests"

By Pamela Sherrid

This is an overcontrolled and rigid person who . . . does not like to display emotion. . . . He suffers from tendencies toward excessive self-blame, self-pity, worry and demandingness. Preferred defense mechanisms are intellectualization, projection and reaction formation.

Psycho-babble like this is common these days. But there's something special about this diagnosis. A computer made it. Psych Systems, Inc., a small Baltimore company that is growing fast by hooking psychiatrists and psychologists on the wonders of integrated circuits, wrote the program. Psych Systems' sales more than doubled last year, to $4.3 million, and profits near-

Jerome Cardin, Jerome Coller and Kenneth Hansen of Psych Systems
Hooking psychiatrists and psychologists on the wonders of integrated circuits.

ly tripled, to $171,000.

James Johnson, a research psychologist, and Kenneth Hansen, a systems analyst, developed their product in the mid-1970s while working at the University of Utah. They designed an on-line computer system to administer, score and interpret psychological tests. But the two founders failed to keep control of their baby. Their original idea was to franchise, and when that proved unfeasible, they tried to sell the system outright. By 1978 they had run out of cash.

A friend of a friend introduced them to Jerome Coller, 57, a physician, and Jerome Cardin, 57, a lawyer. Coller and Cardin, buddies since elementary school, came through with a mere $50,000 in initial venture capital and ended up with a big chunk of the equity in Psych Systems. Hansen and Johnson now own only 8.1% each of the stock, which was offered to the public in September at $5 a share and since has risen, to just over 13.

"We were pretty naive then," says Hansen, now executive vice president, who today thinks he could have swung a much better deal.

Still, it's better to own 8.1% of something than 100% of nothing, and Psych Systems has become something. It sells Digital Equipment minicomputers and its own application software to give a battery of psychological tests: from a scale that measures depression, and thus the likelihood of a suicide try, to career assessment (Is John best suited to become an airline pilot or a forest ranger). The patient described above sat at a computer terminal and answered "true" or "false" to 550 statements flashed one by one onto the screen. In minutes, a seven-page report on his personality was ready for his psychiatrist or psychologist.

That speed has encouraged the entrepreneurial ambitions of mental-health professionals. Until Psych Systems started selling its products in 1979, psychologists mostly gave tests by pencil and paper and either scored them themselves or mailed them to an optical-scanning outfit to be graded and interpreted—a two-week process. Now, after buying a Psych Systems package for between $20,000 and $62,000, psychologists can offer testing services in their own offices. Some are selling computer services to less venturesome colleagues via remote terminals. Quicker diagnosis also means, presumably, that patients are getting help more quickly, most important for those whose problems can be alleviated by drugs.

Coller, a graying man who turns on and off rather abruptly an affable doctorly manner, has been guiding the company as president and chief executive since 1978. He has lots on his mind. He still tends his practice in internal medicine, in the same building as Psych Systems.

Psych Systems has room to grow in a market of 120,000 clinical psychologists and psychiatrists. But Coller is directing his small research and development staff of four psychologists and seven programmers toward the much larger industrial market: tests of the accuracy of secretaries, the honesty of bank employees and the mental stability of workers in nuclear plants. Psych Systems also plans to sell programs for use on personal computers. Psychologists who buy software alone will have to pay larger royalties than those who buy the hardware package. Today royalty fees, however, account for only a tiny percentage of the company's revenues, but the fee income will grow.

Competition does loom. National Computer Systems, a leading scorer of pencil-and-paper tests, has recently acquired a tiny firm with the same sort of interactive testing capabilities as Psych Systems'. That's a big threat. NCS also happens to license to Psych Systems its most popular personality test, and that arrangement expires at the end of this year. Psych Systems is developing its own personality test, but if NCS refuses to renew the license, "it could be a problem," Coller admits.

Luckily for Psych Systems, Coller realizes he can't meet these threats and challenges to a healthy growing company while also ministering to his own patients. He is interviewing candidates to take over the chief executive's job. And he's willing to give away some equity as an inducement. "I'm looking for someone who has fast-tracked a company before," Coller says. "We have the best psychologists and programmers. Why not get the best business person?"

An admirable sentiment. But not everyone who has had a taste of success running an up-and-coming company would be willing to let go of the power. "It's not so much humility as common sense," Coller says. "We've taken our own tests. We all have limitations, and we're fortunate enough to recognize them."

The Up & Comers

Here's a Detroit auto industry supplier that has weathered the recession in fine shape. But the toughest test is yet to come.

"We had three years to get our house in order"

EVEN IN A LATE-NIGHT storm, when it is hard to see beyond the windshield, the sign on eastbound Interstate 94 in Detroit is visible almost a half-mile away. The sign keeps a running tab on the numbers of cars produced by the city's automakers. In recent years, with imports, the recession and high prices, that count has grown, but slowly.

While GM and Ford suffered, one of their suppliers, Newcor, Inc., set records. In the last five years the small ($68 million sales) designer and manufacturer of special-purpose machinery has averaged a 21.7% return on equity on modest debt. During that time it had a compound earnings growth rate of 35%.

Detroit's troubles actually created Newcor's success. But now that automakers are showing life, Newcor faces challenges of its own.

The tale begins about four years ago, when Newcor Chairman Frank L. Gofrank and his top executives huddled in their Troy, Mich. headquarters and plotted Newcor's future. "You could see that the carmakers would have to make their cars smaller and

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take weight off to get mileage up," he says. "That meant there would be plenty of work for us. But we realized jobs like this would not keep coming. Once the cars got smaller, there wouldn't be that much more we could do, and we would be without work. We figured we had three years to get our house in order and line up new work."

Newcor decided to apply its automotive skills to other businesses. Growing up in Detroit, it had accumulated industrial design and engineering expertise that Gofrank was sure the company could capitalize on, fulfilling his vision of the future. Gofrank, who had been a partner with Coopers & Lybrand, Newcor's auditor, left the Big Eight accounting firm in 1969. Soon after, he was running Wilson Automation, a maker of automation equipment for metalworking industries. Wilson is now a Newcor division. "If America is going to survive as a manufacturer, it will have to automate," he says. "And designing and building systems to let manufacturers automate is something we know how to do."

"Once the cars got smaller, there wouldn't be that much more we could do, and we would be without work," Gofrank recalls.

So Newcor started to diversify. Eonic Inc., the world's leading maker of cams and camshafts, was acquired to help Newcor move into aerospace and defense. Indocomp, a maker of industrial computers, was also acquired. The acquisitions, which at one point increased Newcor's debt-to-equity ratio to 25% from only 5%—it now stands at 14.5%—have paid off. Automotive sales are steadily accounting for less of the company's volume, and last year brought in only half of revenues.

Still, Newcor is running uphill. "We are waiting to hear on two jobs of $10 million each. With the recession, everything has been on hold," Gofrank says.

With a slowdown in auto industry business, too, Newcor's earnings should be flat in 1983. Fiscal first-quarter results showed earnings of $428,000 on sales of $18 million, compared with $820,000 on first-quarter sales of $14 million a year ago. The real test of the transition will come next year. Gofrank thinks he already knows the outcome. He says, "We should do well."—**Paul B. Brown**

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As if losses, debt and cash shortages weren't enough, Quickprint, Inc.'s own franchisees are suing it for fraud. CEO Al Lapin is discovering what happens . . .

When love is gone

By Barbara Rudolph

IN THE FRANCHISE BUSINESS the tired old refrain "our people are our greatest asset" amounts to a declaration of love. The relationship between the franchisees and franchisor is the essence of the enterprise. When the relationship crumbles, the greatest asset becomes the greatest liability.

Al Lapin Jr., 55, chairman and CEO of Quickprint, Inc. (FORBES, *Dec. 6, 1982*), a franchisor of 525 instant-printing stores, may be learning the lesson the hard way. Some 49 franchisees of his Big Red Q Quickprint stores have banded together to sue the parent company.

Specifically, the franchisees assert, Quickprint took kickbacks from suppliers of printing equipment that the franchisees were forced to purchase. Those charges stem mainly from the years before Lapin bought Quickprint, in 1981. But the franchisees also allege that under Lapin, Quickprint failed to deliver promised marketing assistance. Quickprint will deny all charges in three separate suits in federal court in Ohio. A judge has ruled that two suits should go to arbitration. The franchisees are appealing that ruling. The end is nowhere in sight. It seems the business equivalent of a nasty divorce.

The suits make up only part of Lapin's problems. He faces a severe cash shortage. The company lost $813,000 on sales of $3.5 million for the six months ended last December, against a loss of $328,000 on sales of $3.5 million in the comparable six months of 1981. That prompted his creditors to extend the repayment on Lapin's unsecured and considerable debt. Lapin says he has $4.2 million in current liabilities, in addition to $2 million in long-term debt and $1.3 million in off-balance-sheet financing.

Some of that liability stems from the 49 franchisees' refusal to pay royalties (5% of gross revenues) while their lawsuits are pending. Other franchisees are withholding payments, too. Some $300,000 in royalties is now overdue, says Lapin.

Lapin misjudged the depth of the recession and, his critics claim, spent too much money hustling new franchises. Lapin isn't even trying to sell new franchises now. Even if he does come out with his company intact—and that is anyone's guess at this point—it remains to be seen if Lapin can rebuild a working relationship with his remaining franchisees.

For the moment, he doesn't seem inclined to do so. "These mom-and-pop outfits," he begins, "they sit on the corner of X and Y, and they learn the instant-print business. And they get the customers. And then they figure, 'Hey, I don't need Big Red Q anymore.' " Of course, the burden is on Lapin to convince his franchisees that they do need Big Daddy. In a cooler moment, he acknowledges that. "We have to make the Quickprint name valuable enough so it's worth the franchisees' while to stay," he says. "The problem is generic to the business."

Behind the litigants' accusations of fraud and kickbacks, there is the refrain of every small franchisee—a cry that Lapin must heed: Teach me the business. Advise me. Hold my hand, I'm a stranger in Businessland.

Says Richard Arnold, 34, former schoolteacher and a Cincinnati franchisee who is a party in the suit against Quickprint: "There was a time when I would have tattooed a big red 'Q' on my butt. We just wanted a pat on the head. All they had to do was stroke us." ■

Quickprint's Al Lapin Jr.
The business equivalent of a nasty divorce.

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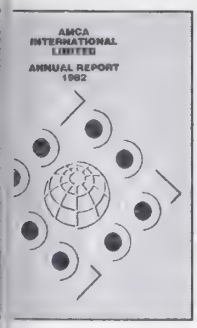
ADAC Laboratories

ADAC Laboratories, one of today's most rapidly growing providers of computerized medical imaging equipment with average growth in revenues and earnings in excess of 65% annually since 1977, reported 1982 revenues of $52.9 million, up 130% from 1981; earnings were $5.3 million. ADAC develops, manufactures, sells and services systems for nuclear medicine, digital radiography, and radiation therapy planning. (OTC-ADAC)

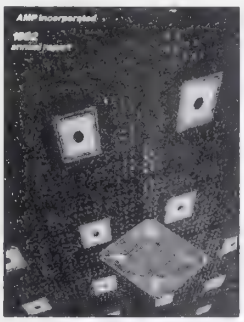
1



AMCA International

In 1982—despite the recession—AMCA's revenues of $1.5 billion and net operating income of $47.1 million were the second highest in our history. AMCA's roots are in bridge building. We began life 101 years ago as Dominion Bridge Company. Today, AMCA International is a worldwide producer of a broad range of industrial products, construction equipment, engineering and construction services, and machine tools.

2



AMP Incorporated

Over 15% compound annual growth rate in sales, earnings & dividends for 31 years.

	Sales (Mil)	EPS	Div.
1982	$1,234	$3.31	$1.40
1981	1,234	3.75	1.20
1980	1,155	3.44	1.00
1970	226	67¢	7¢

Steady Growth—through new products. Sales up all but 3 of 41 years. Nearly ¾ of sales electronics-oriented. *Broad Diversification*—World's leading producer of electrical/electronic connection and switching devices—75,000 types and sizes, 85,000 customers (manufacturers, distributors, retailers, utilities, transportation field, etc.) Subsidiaries in 25 countries (AMP-N.Y.S.E.).

3

Alexander & Baldwin, Inc.

Alexander & Baldwin, Inc., net income rose 65 percent in 1982 to $40 million, or $4.36 a share, on revenues of $398 million. Improved results expected in 1983. Sugar operations returned to profitability. Matson subsidiary produced another strong performance. A&B has paid cash dividends in every quarter since 1903, and paid out $1.80 a share in 1982.

4

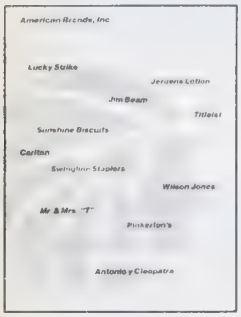
Allis-Chalmers Corporation

Allis-Chalmers is committed to added customer value as a specialized technology company helping the world meet changing needs for energy, food, water, clean air and minerals. The Annual Report describes the progress of ongoing strategies of asset management, operational resizing and concentration of resources on specialized technologies in a balanced effort to capitalize on profitable long-term growth potential.

5

American Medical International

AMI owns, manages and develops h tals and provides health care serv throughout the world. Increased uti tion of AMI facilities and service sulted in record earnings of $78.8 mi or $1.67 per share on revenues of $1. lion in Fiscal 1983. Continued stron ternal growth and the addition of facilities should result in further earn gains of 20-25 percent over the next years.



American Brands, Inc.

American Brands is a group of related packaged goods and service companies. Lines include Carlton, Lucky Strike and Pall Mall cigarettes, Jim Beam bourbon, Master Locks, Sunshine biscuits, Titleist golf balls and Swingline staplers. In services, the company owns Franklin Life Insurance and Pinkerton's. 1982 sales were $6.5 billion and net income was $6.55 per common share.

6

Amfac, Inc.

Amfac, a diversified NYSE-listed pany with operations in wholesale tribution, food processing, hotels an sorts, Hawaii land and sugar, horticu and retail, had revenues of $2.2 billi 1983. Amfac is oriented toward grow activities promising above-averag turns, has an unbroken history of dend payments since 1918, and a mitment to grow shareholder investr over time.

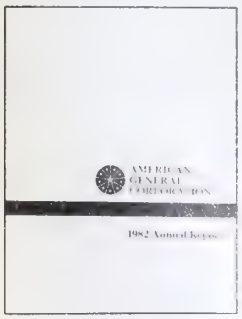
American Business Products, Inc.

American Business Products, Inc., which recently announced its entry into the market for small business computers and software, is one of the nation's leading producers of printed business supplies. The company had record sales of $222.6 million in 1982, representing the 44th consecutive year of sales increases. During the last decade, sales and net income have increased at a compounded annual growth rate of about 15%. Dividends have been increased for 26 consecutive years. NYSE: ABP

7

Avery International

Avery International achieved re operating results in the fiscal year e November 30, 1982. Net income ro $26.8 million, or $2.98 per share, o sales of $712.2 million. Avery is a lea worldwide manufacturer of self-adh labels, pressure-sensitive tapes and materials, labeling systems and o products. (NYSE: AVY)



American General Corporation

The nation's 4th largest shareholder-owned insurance and diversified financial services company operates through three business divisions: life and health insurance, property-liability insurance and other financial services. 1982 marked the seventh consecutive year in which American General reported new highs in operating results. Earnings from operations totaled $202.7 million, or $7.24 per share, up from $6.54 per share the previous year. NYSE: AGC

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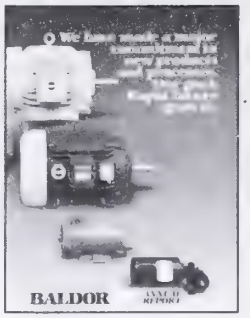


Baldor Electric Compa

Despite a down year (1982 sales off Baldor, a leading marketer of en efficient industrial electric motors creased its market share, introd many new products from increased phasis on research and development proved productivity and product qu via major capital spending, rema financially strong, developed a Super-E premium efficiency line introduced in 1983. Future pros look excellent.

BancTEXAS Group Inc.

BancTEXAS Group Inc. is a $1.8 billion Texas bank holding company with 13 member banks in the Dallas, Houston, and Tyler areas. BancTEXAS Dallas N.A. is the flagship bank. Performance ratios for the year ended December 31, 1982, include return on assets of 1.09% and return on equity of 16.72%. BTX management places a premium on profitable growth, both through internal expansion and acquisition, and through investment he company's resources in assets of sound quality. BTX's com- n stock is traded on the NYSE.

13

Bank of Montreal

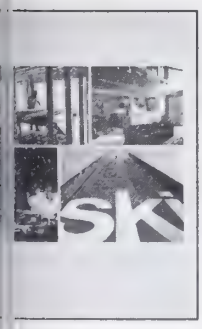
Bank of Montreal, a major international bank with assets of $62 billion, has over 1200 computer-linked Canadian branches and operates in key financial markets in 20 other countries. Net income has increased by 17.8% annually over the past 5 years, although 1982 net income of $257 million reflected poor economic conditions. 1983 first quarter net income improved over the first and fourth quarters of 1982. 1982 common dividend $1.96 per share, an annual growth rate of 14.7% over the past ears. Listed on major Canadian and London, England anges.

14

Bayly Corp.

Established in 1898, Bayly is carving a new niche in the world of ready-to-wear fashion. Its current line offers pants, jeans, casual slacks and shorts in various hues, textures, and materials for men and women, and girls and boys. The company has developed its own distinctive brands and is a licensee of a very successful brand of sportswear, Ocean Pacific (OP).

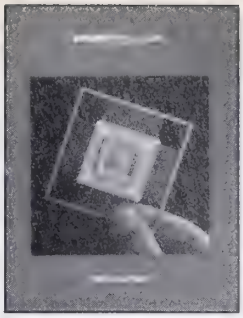
15



Blue Ridge Real Estate Company

Blue Ridge/Big Boulder (OTC) owns 30,000 acres in eastern Pennsylvania, principally the Pocono Mountains, utilized for recreational purposes and natural resource exploration. At Jack Frost Mountain and Big Boulder ski areas resort homes are being constructed in a transition to destination resort status. Also owned are two office buildings in Lehigh Valley and an office park in suburban Philadelphia.

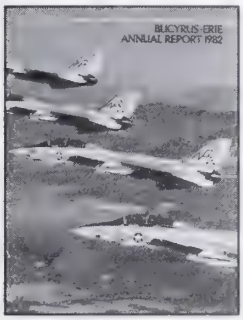
16



Brush Wellman Inc.

Brush Wellman is a leader in beryllium technology and the world's foremost producer of beryllium in its alloy, metallic and ceramic forms. The Company is also a leading manufacturer of specialty clad metals. In addition, high energy friction materials and related products are produced for use in heavy-duty equipment and vehicle applications. The Company has a five-year compound growth rate of 19 percent in dividends and earnings from continuing operations.

17



Bucyrus-Erie Company

Bucyrus-Erie Company achieved record shipments of $687.3 million in 1982, a 38.5% increase over 1981's volume of $496.4 million. Higher volume was due to Western Gear Corporation, acquired by the Company in September, 1981, and increased mining machinery export shipments. Net earnings were $25.7 million ($1.26 per share).

18

CP National Corporation

CP National Corporation is a diversified communications and energy service company, providing telephone, gas, electric and water utility services in various areas throughout the Western United States, and emerging as an industry innovator by providing various unregulated services, both communications and energy related. CP National is growth-oriented with a concern for people and a commitment to service and profitability.

19

CSX Corporation

America's leading transportation and natural resource company, with $8.1-billion in assets, recorded its second best year in 1982, posting earnings of $8.10 per share. CSX railroads link 22 eastern and southern states and are the world's largest haulers of coal and phosphates. CSX is positioned to participate fully in the anticipated economic upturn. Additional holdings include coal, oil, natural gas, aviation, land development, timber and resort properties.

20

Central Reserve Life Corporation

Central Reserve Life, the "Preferred Company," has refined innovative insurance products which offer maximum coverage at minimum cost to preferred risk groups. Since 1976, CRL has had an unbroken record of increased income and premiums created by unique growth strategies. Highlighting 1982 was the introduction of another exclusive CRL product, the Keystone Trust, which pools favorable and preferred risks for rate renewal.

21

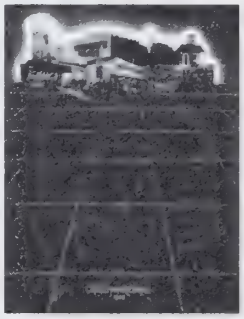
Coachmen Industries, Inc.

Coachmen Industries, Inc. is a leadi manufacturer of recreational vehic with important interests in manuf tured housing. Sales were $263 millior 1982 and earnings were $1.60 per sh compared to $.58 in 1981. The impro outlook for fuel availability and inter rates have significantly enhanced pr pects for the future.

Chesebrough-Pond's Inc.

Chesebrough-Pond's met the challenge of a difficult economic environment and achieved its 27th consecutive year of record sales and profits in 1982. Leading brand names for this diversified worldwide marketer of consumer products for the family (1982 sales: $1.62 billion) include: Ragu, Health-tex, Prince, Bass, Weejuns, Pond's, Adolph's, Vaseline, Cutex, Intensive Care, Cachet, Wind Song, Aviance, Chimere, Prince Matchabelli, Q-tips, Aziza and Rave.

22



Cole National Corporation

With 1,700 stores, Cole National has come one of the fastest growing speci retailers. Prescription eyewear, crafts, graved gifts, keys, cookies, and toys sold by Cole's six chains. Child Worl toy supermarket chain accounts for half of total sales. Over the last dec sales increased more than ten fold w compounded net income over 2 per year.

Chieftain Development Co. Ltd.

Exploring for oil and gas in Alberta, the United States and the North Sea, Chieftain increased the undiscounted value of future net cash flow from proved and probable reserves by 34% to $3.1 billion at December 31, 1982. Chieftain achieved record net earnings of $18.2 million and cash flow of $40 million on gross revenues of $82.8 million during 1982. Listed ASE, TSE, MSE.

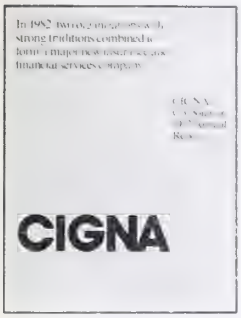
23

Community Psychiatri Centers

Community Psychiatric Centers is gaged in two separate lines of busir the ownership and operation of a psychiatric hospitals which in 1 accounted for 80% of operating pr and the operation of outpatient dia centers which accounted for 20% of ating profits.

Earnings per Share

1978	1979	1980	1981	1
$.36	$.47	$.57	$.78	$



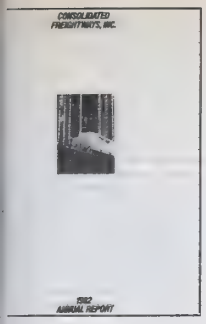
CIGNA Corporation

CIGNA Corporation, formed through the 1982 merger of Connecticut General and INA Corporations, is a leading provider of insurance and financial services to corporations and individuals around the world. As a result of the merger, CIGNA is one of the most strongly capitalized organizations in its industry, with modest long-term debt and common shareholders' equity of more than $4.5 billion.

24

Comp-U-Check, Inc.

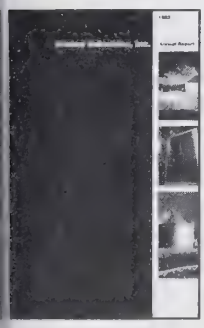
Comp-U-Check, Inc. is a well establi publicly held growth oriented Com using a network of sophisticated communication facilities to pro financial payment services to variou dustries on a national basis. The C pany's customer base includes m retailers, banks, utilities, hospitals other businesses. 1982 sales rose 20% record $4.9 million, and pre-tax ear rose 49% to $360,000. Return on s holders' equity was 45%. Sales have increased an average of 19 the last five years. Strong management, increased market per tion and solid financial condition position Comp-U-Chec future years



Consolidated Freightways, Inc.

Consolidated Freightways, Inc. provides a range of freight transportation services unmatched in variety or geographic scope in North America. Consolidated Freightways motor carrier operations are expanding and gaining market share in longhaul, less-than-truckload freight. New subsidiaries serve special trucking needs. CF Air Freight is growing domestically and internationally. Revenues were cord $1.2 billion in 1982. Net income was $54.8 million, $4.08 share. Dividends paid were $1.58 per share.

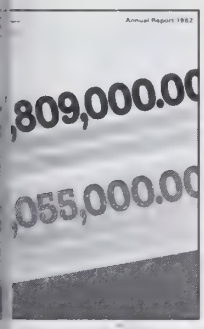
29



Cronus Industries, Inc.

Cronus Industries (OTC—CRNS) completed 1982 with higher sales, net income and earnings per share. Beyond joining a relatively small group of corporations posting increased profits, Cronus also strengthened its total financial structure via careful asset management. The Company has grown—in just six years—from sales of $32 million to $166 million. Products include metal buildings for non-residential construction, heat trans- quipment for electric utilities and a diverse range of equipment he agri-industry.

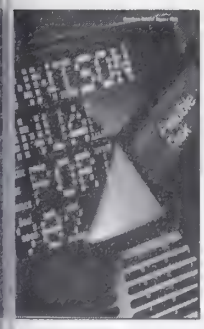
30



Decision Data Computer Corporation

While revenues were up 48% over the previous year, Decision Data's net income rose 85% to $3,809,000. The company's present product concentration focuses on peripherals for medium-sized computer systems. This is the fastest growing segment of the full-scale computing capabilities market. The company's sales goals and product lines are being expanded for 1983. The NASDAQ onal Market symbol is DDCC.

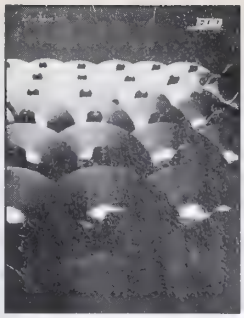
31



Dennison Manufacturing Company

Dennison serves Retail Systems, Stationery Products, Technical Papers, Industrial Systems. Its *balanced risk* approach—balancing established products and emerging technologies—gives shareholders an upside potential for their investment without the win-or-lose character of a single product technology company. 1982 sales rose to a record $577,281,000 but earnings fell to $20,637,000 in this re- onary year. However, during the fourth quarter of 1982, Denni- eached record high earnings before taxes.

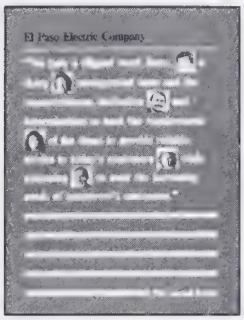
32



EDO Corporation

EDO produces electronic and specialized equipment for military, aviation, marine and industrial markets. Principal products: sonar equipment, mine countermeasure systems, and aircraft stores ejection mechanisms. Piezoelectric ceramic components, acoustic and video scanning systems; fiber-reinforced composite components for aviation industry. World-wide markets. Sales from continuing operations in 1982: $101,794,000; net earnings from continuing operations $7,420,000. EPS from continuing operations $2.18. DIV. $.31 plus 50% Stock Dividend. (ASE)

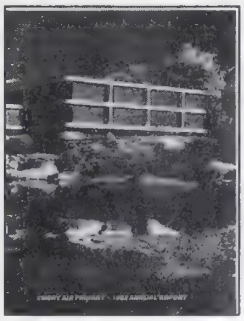
33



El Paso Electric Company

El Paso Electric Co. provides electricity to one of the fastest growing regions of the nation, sometimes referred to as "The Buckle on The Sunbelt." The Company completed another year of strong financial performance in 1982. Per share income increased from $2.23 to $2.30 and net income increased by 25%. Return on average common equity remained above the industry average. The Company continues to sell its Common Stock at or above book value. A leading investment bank ranks EPE among the top 20 electric utilities for payout ratio, market to book ratio, dividend to book ratio and return on average equity.

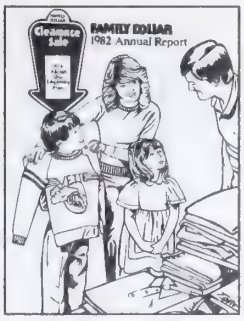
34



Emery Worldwide

Emery Air Freight Corporation is an international air cargo system operating from 275 offices in 49 countries. It delivers overnight any size, any weight, any value shipment to 20,000 North American communities, and it provides scheduled 24- to 72-hour, door-to-door service between North America and Europe.

35



Family Dollar Stores, Inc.

Family Dollar (NYSE:FDO) operates more than 600 discount stores in thirteen states ranging from Maryland to Louisiana. Fiscal 1982 sales increased 14% to $207.4 million and net income increased 17% to $10.7 million. Family Dollar now has reported 31 consecutive quarters of record sales and earnings on a comparable basis. During fiscal 1982, 74 stores were added to the rapidly expanding chain, and at least 100 new stores will be opened in fiscal 1983.

36

Ferro Corporation

A diversified worldwide manufacturer of specialty materials, Ferro Corporation serves industrial customers with a range of technically advanced coatings, colors, ceramics, thermoplastics and specialty chemicals. These products are essential to the rapid technical changes which are occurring in the mature industries such as automotive, and likewise are utilized by the growth industries including electronics, communications and aerospace/defense. In 1982, Ferro net sales exceeded $595 million.

37

Gearhart Industries, In

Gearhart Industries, Inc., continue broaden its base in the wireline serv industry. New technology throug aggressive research and developn program has produced more durable dependable logging tools as well a novative methods of logging and perf ing the growing number of deviated w Gearhart's rapid penetration of the i national wireline service market compensated for this year's reductio domestic activity. Gearhart has paid consecutive annual divid since 1960.

First Interstate Bancorp

With assets of $40.9 billion, the company is the 8th largest U.S. banking organization. It ranks 6th among major U.S. bank holding companies in return on assets and 7th in return on equity. At $2.11½ a share paid in 1982, dividends were up 6.3% over 1981, the 6th increase in just over 5 years, during which time the dividend rate has grown 114%. The company's First Interstate Banks operate 936 offices in 11 western states. Alaska and Hawaii will become vital extensions of this territory in 1983 via franchising of the First Interstate name and banking products.

38

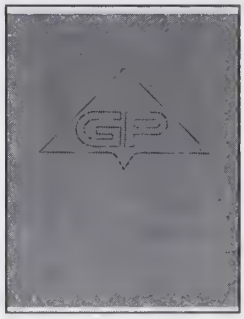
Genetic Systems Corporation

Genetic Systems Corporation is a le in monoclonal antibody technology advanced diagnostic test for chlam the most prevalent sexually-transm disease, has been jointly develope Genetic Systems and Syntex Corp tion, and approved by the FDA. New nostic products for herpes and gono are also under joint development. netic Systems and Syntex recently e lished Oncogén, a $9.5 million joint venture to develop produc the diagnosis and treatment of human cancer. NASDAQ: GEN

FlightSafety International, Inc.

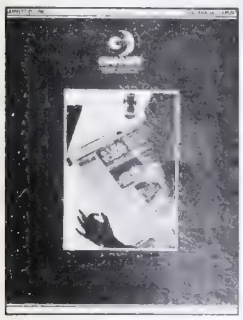
Net income and revenues continued to increase in 1982 for FlightSafety International (FSI-NYSE), leading high technology aviation and marine training company, as its clients rose to more than 2,100 from over 1,850 in 1981. Net income in 1982 increased to $21,369,300 ($1.46 per share of common stock) on revenues of $76,484,800, from $19,083,900 ($1.31 per share) on 1981 revenues of $68,039,900.

39



Georgia-Pacific

Georgia-Pacific net sales in 1982 $5.4 billion. To off-set the pressures recessionary year and to prepare for advancement in the coming years, management moved ahead with s bold tactical decisions. Operating were cut, facilities consolidated and modernization continued in plants mills in all major divisions. G-P steady progress into new markets strengthened their competitive pos in the marketplace. More than ever, the years ahead show the p ise of exciting growth and significant profit potential.



Gannett Co., Inc.

Gannett, the nationwide diversified information company, had record revenues and earnings for the 15th consecutive year in 1982. Net income rose to $180 million on revenues of $1.51 billion. In 1982 Gannett launched USA TODAY, The Nation's Newspaper, which reached into 15 major market areas nationwide during its first seven months. Gannett operates 86 other daily newspapers, 7 TV and 13 radio stations, America's largest outdoor advertising group, and news, research, marketing, video, program and satellite services.

40

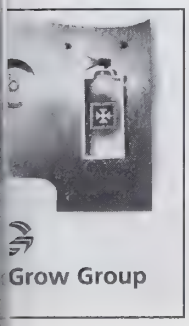
Golden Triangle Royal & Oil, Inc.

GTRO has overriding royalty inte under 85,111,040 surface acres, be net 3,571,353 royalty acres, and an 1 net profits interest under 11,923,200 face acres in Australia, with expecta of them being developed for oil and GTRO also has interests in 87 oil an wells, principally in the United St with high percentage increases in pro tion in 1982.

Grove Explorations Ltd.

Grove Explorations is an aggressively managed company with significant acreage holdings of oil and gas properties in North America, along with an operative gold mine in Canada. Coupled with associated companies Rosmac Resources and N.W.P. Resources, they seek out potential large wildcat drilling ventures. Davis Oil Company of Denver is the operator on six of the company properties at present.

45



Grow Group, Inc.

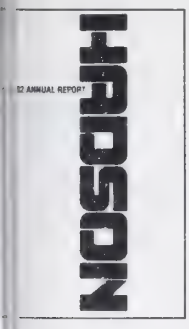
Grow Group, Inc. has grown from $10 million in sales to over $230 million, paid consecutive quarterly cash dividends for the past 19 years, and over 155% in stock dividends. The Corporation is well-positioned for the anticipated recovery. Subsidiaries and divisions geared to the auto and construction industries and consumer markets have weathered the recession well.

46

Gulf Energy Corporation

Gulf Energy Corporation (NASDAQ symbol GFEC) was named America's fastest growing public oil, gas and minerals company for 1982, based on revenue, by Inc. Magazine. The Company has earned record revenues since reorganization in 1976 and has expanded its drilling program since that time. Corporate offices are in Salt Lake City, with regional operations in Denver, Oklahoma City and Logan County, West Virginia.

47



Hadson Petroleum Corporation

Hadson Petroleum Corporation is an independent oil and gas exploration, development and production company headquartered in Oklahoma City, Oklahoma. Domestic activities are primarily concentrated in the Anadarko Basin of Oklahoma and the Arkoma Basin in Oklahoma and Arkansas. Through its 75.8% owned subsidiary, Hadson Petroleum International, the company ts its foreign activities onshore Southern England, offshore rn Spain and in the Western Desert of Egypt.

48

Frank B. Hall & Co. Inc.

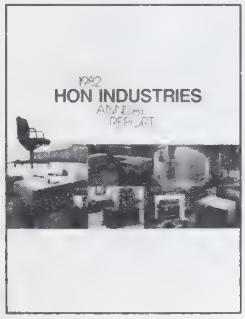
Frank B. Hall is a leading international insurance services firm with revenues of $364,871,000 and net income of $24,043,000 ($2.07 per share) in 1982. Revenues have more than doubled during the last 6 years. Since 1975 dividends have increased at a compound annual rate of 19%. Currently the Company pays $1.70 annual dividend. NYSE symbol FBH. The editorial section of the Hall Report contains a highly educational overview of the worldwide insurance marketplace.

49

Harsco Corporation

Harsco Corporation manufactures, markets and distributes internationally 22 varied classes of products and services used in industrial, commercial, energy-related and defense applications. Harsco weathered the recessive economy in 1982 better than most industrial concerns with sales of $978.6 million, net income of $36.1 million and earnings per share of $1.85. Harsco's financial position remains strong, and the dividend has been maintained at $1.20 per share.

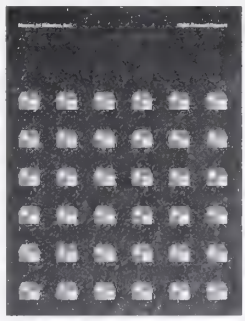
50



HON INDUSTRIES

1982 net sales, $283,167,000. Ten year compounded annual growth rate in sales, 16.6%. 1982 net income, $11,172,000. Ten year compounded annual growth rate in net income, 10.2%. 112 consecutive quarterly dividends, with 56¢ paid in 1982. Products manufactured and marketed nationally include office furniture, materials handling equipment and Heatilator® fireplaces. Traded O.T.C., symbol HONI.

51



House of Fabrics, Inc.

House of Fabrics, Inc. achieved all time highs in sales and earnings for the year ended January 31, 1983. Sales were up 28% to $230.6 million and earnings per share on a fully diluted basis rose 45 percent to $1.77 compared to $1.22 for the previous year. The Company has never been in stronger financial condition and plans to expand its business in the coming year by opening 40 to 50 new stores and by adding an additional 75 sewing machine and 100 needlecraft departments in its existing stores.

52

IU International

IU International is a diversified services company with 1982 revenues of $2.1 billion. Its operations include transportation, distribution, environmental services, agribusiness and gold mining. In recent years, IU has refocused its resources in less capital-intensive businesses and shed two-thirds of its debt. IU's dividend was $1.125 in 1982, the 38th consecutive year of higher payout per share. NYSE symbol: IU

53

InterNorth, Inc.

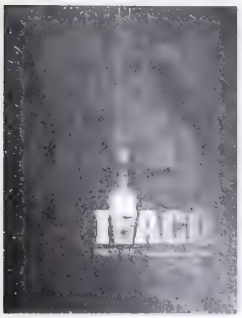
InterNorth is a diversified, energy-based corporation involved in natural gas, liquid fuels, petrochemicals, and exploration and production. The 1982 Annual Report shows earnings of $3.01 per share, net income of $135,066,000 and operating revenues of $4,158,986,000. International headquarters: Omaha, Nebraska.

54

Iowa Resources Inc.

Revenues surpassed $385 million in 1982. Earnings for the year were $3.66 per common share. Dividends have been increased to the annual rate of $2.92 per share, formerly $2.84. Iowa Power and Light Company, the principal operating subsidiary, serves 231,074 electric and 133,294 gas customers in a 5,600 square mile area of central and southwest Iowa.

55



Ivaco Inc.

Ivaco is an integrated steel producer and manufacturer of steel products. The Company has three steelmaking facilities, all employing electric furnaces and continuous cast technology. Steelmaking capacity exceeds one million tons and rolling mill capacity is in excess of 1.3 million tons. Products include wire rods, wire, nails, welded wire fabric, fencing, fasteners, high carbon wire products such as wire ropes and strands, forgings, pre-engineered metal buildings, precision machined components and paper machine clothing for use by paper manufacturers. The Company has 36 plants, 20 in the U.S. and 16 in Canada.

56

JWT Group, Inc.

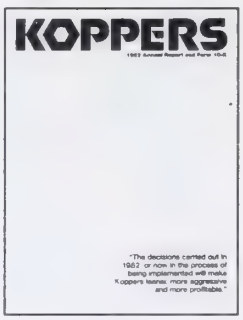
JWT Group, with total revenues of $ million, is the parent of an internati family of well-known companies eng in advertising, public relations, resea and related activities.

KDI Corporation

KDI Corporation is a diversified gr company active in the productio electronic and electrical compon defense ordnance devices, custom ucts to user specifications, as we activities in industrial distribution, recreation. Sales—$190,000,000. L on the New York Stock Exchan 11/30/81—"KDI".

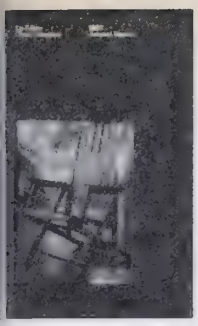
Knight-Ridder Newspapers, Inc.

Knight-Ridder Newspapers, Inc. is a billion nationwide communica company engaged in newspaper lishing, television broadcasting, television operations, electronic dis tion of commodity and financial and market quotes, newsprint pr tion, book publishing and data base lishing. The company is pioneering commercial introduction of view consumer information services. Knight-Ridder common trades on the NYSE under the symbol KRN.



Koppers Company, In

Prepared for economic recovery streamlined operations, aggressive ket positions and strong finances, pers anticipates renewed growth frastructure, construction, capital and industrial production markets business opportunities are sought investments in genetic engine synthetic fuels, fiber optics, technology ceramics, robotics and age metallurgical materials. "High from the 1982 Annual Report" will be mailed.



La-Z-Boy Chair Co.

Based in Monroe, Michigan; La-Z-Boy Chair Company has been the leading manufacturer of reclining furniture for more than 50 years. Today, La-Z-Boy products include office furniture, sleepers, sofas, loveseats and swivel rockers, in addition to its popular wall and rocker recliners. Increases in sales of La-Z-Boy recliners, as well as successful introductions of new product offerings, have given La-Z-Boy added stature and financial ngth during the past year. The La-Z-Boy Chair Company 1983 ual Report offers a historical view of the company and its di- e product line, provides a perspective on its aggressive market- ffort and details its brisk financial growth.

61

Lifemark Corporation

Lifemark Corporation (NYSE Symbol LMK) owns and operates general acute care hospitals primarily in the Southern United States. Lifemark's growth ranks among the fastest in the expanding hospital management industry.

Growth Rates*

	5 year Compound	1982
Revenues	45%	60%
Net Income	59%	53%
Primary earnings per share	37%	39%

*All data is from continuing operations

62

Liquid Air Corporation

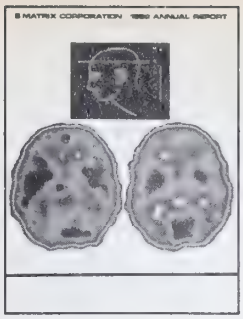
Liquid Air Corporation is a major producer of industrial gases, welding products, and safety and diving equipment. With the acquisition of Cardox Corporation during 1982, one of America's leading producers of CO_2, Liquid Air has assumed a position of new importance in the industrial gas marketplace in the United States, Canada, and Brazil.

63

Masco Corporation

"A UNIQUE GROWTH COMPANY"
Masco reported its 26th consecutive year of earnings growth. Net income in 1982 was $92.2 million or $1.78 per share, representing increases from the previous year of 4 percent and 3 percent, respectively. Masco, with leadership market positions, manufactures faucets and other building products; energy-related and other specialty products; and cold extruded and other industrial products. for our 1982 annual report to learn why we believe Masco's from internal growth alone, will more than double over the ive years.

64



Matrix Corporation

($ in millions except for EPS)

	1982	1981	1980	1979	1978
Sales	$40.4	$26.0	$19.6	$14.0	$ 5.7
Net Income	$ 4.0	$ 2.7	$ 1.9	$ 1.2	$ .2
EPS	$ .95	$ .68	$ .52	$ .41	$ .10

Manufacturer of Medical Diagnostic Imagers and Video Disc Recorders for computed tomography, ultrasound, nuclear cameras, digital radiography, fluoroscopy, nuclear magnetic resonance, et al; and Computer Color Graphic Film Recorders for CAD/CAM, management information, satellite photography, animation films, scientific graphics, etc. ASE: MAX

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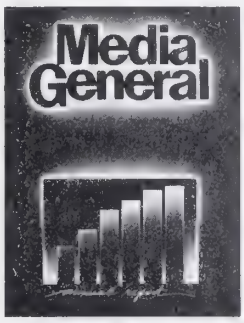


Media General, Inc.

The seventh largest public newspaper company in revenues, net income, and circulation, Media General is a diversified communications company with major interests in broadcasting, publishing, and printing operations, along with its newsprint subsidiary which produces through a special recycling process about one-tenth of all U.S. newsprint. For the past five years, Media General's compound growth in earnings per share of 21 percent per year ranks second in the newspaper industry.

66

Michelin Tire Corporation

Michelin, the company that put America on radials, is one of the major tire manufacturers in the United States. A privately held company, Michelin Tire Corporation was founded in 1950. The 1983 brochure outlines the scope of the company's U.S. operations today, from manufacturing to distribution. It also includes Michelin's corporate history and reviews its major products and services.

67

Minnesota Power

Minnesota Power is an investor-owned electric utility serving a 26,000-square-mile area of central and northeastern Minnesota. In 1982 the company's earnings per share increased 15% to $3.51. Rate of return on common equity was 14.8%. In January the Board of Directors raised the quarterly common stock dividend from 57 to 60 cents per share, marking the 13th consecutive year in which dividends have increased.

68

Morehouse Industries, Inc.

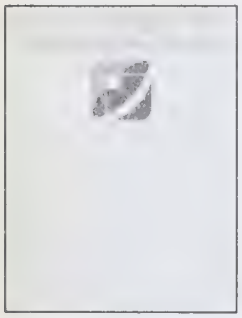
Morehouse Industries (OTC:MIXS) is a world leader in the design and manufacture of completely patented high speed dispersion and particle reduction systems. Sales in 104 countries. The Company recently introduced the industry's first computer controlled dispersion/milling/processing system; a major R & D effort completely self-funded. Annual report highlights new products, continuing growth and financial stability.

69

Morrison-Knudsen Company, Inc.

Record highs for the 11th successive year in earnings and revenue were achieved in 1982 by Morrison-Knudsen. This 70-year-old company engages in large-scale engineering, construction and construction-management projects on a worldwide basis, in addition to building and repairing naval and commercial ships, operating coal and lignite mines, and developing commercial real estate. Contract backlog at 1982 yearend was $3.2-billion. ("MRN" on NYSE)

70



Movie Systems, Inc.

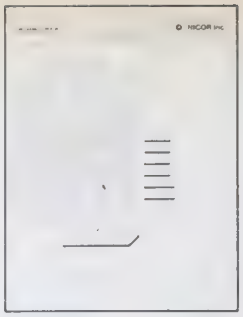
Movie Systems, Inc. is an operator of over-the-air pay television systems in Milwaukee, Oklahoma City, Ft. Lauderdale/West Palm Beach, Minneapolis, and Indianapolis. The company services approximately 72,000 subscribers. MSI has experienced rapid growth over the last three years in an industry generally regarded as one of the nation's finest growth areas. With the expected approval of multiple channel MDS, MSI and the industry will be able to compete effectively with cable.

71

Niagara Share Corporation

A diversified publicly traded investment company whose primary objective is growth of capital from investments in domestic and foreign corporations. Superior long-term record. Directly managed by its officers and directors, who are substantial shareholders. Shares are eligible for Individual Retirement Accounts and Keogh Plans. 54th Annual Report includes investment policy, distribution options and investment results. Listed on The New York Stock Exchange.

72

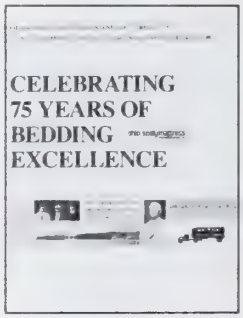


NICOR Inc.

NICOR is a $2.2 billion energy en prise. Effective May 1, 1983, the an dividend increased to $3.04 per share the 24th increase in 25 years. Altho 1982 income failed to top the prev year's level for the first time in 15 y NICOR subsidiaries are solid, w financed and ready to take advantag growth in the nation's economy. N GAS.

Northwest Energy Company

Northwest Energy Company owns major natural gas pipeline syste Northwest Pipeline Corporation deli natural gas to the Pacific Northwest Rocky Mountain regions. Northv Central Pipeline Corporation supp gas to the Mid-Continent region. N west is also a partner in the Northern der Pipeline and is involved in oil an exploration and marketing of li hydrocarbons. Financial highlights for the year ended Decembe 1982: operating revenues, $1.6 billion, income from continuin erations, $66.6 million, primary income per share from contin operations, $3.47.



Ohio-Sealy Mattress Manufacturing Co.

We've had seven consecutive years o ord or near-record earnings. Since 1 sales increased 126 percent to $67 mi last year, and net earnings rose 169 cent to nearly $6 million. (Average se year net as a percent of sales—8 perc Since 1970, compounded annual dend growth rate was 34 percent (1 creases in 12 years.) Current quar rate, 15 cents. We make Sealy brand ding. We're OMT on Amex and PSE.

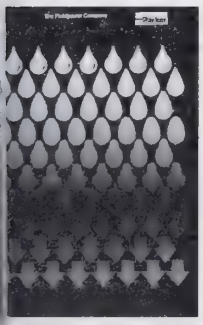
Overseas Shipholding Group, Inc.

OSG is the only publicly owned com engaged exclusively in the ocean t portation of bulk commodities suc oil, coal, iron ore and grain in both U.S. and worldwide markets. Amon largest bulk shipping companies i world, OSG owns and operates a fle 77 vessels, aggregating 6.6 million weight tons. The Company's st financial condition, reflecting its gr record, and prospects for the various bulk shipping markets a tailed in the 1982 Annual Report. (NYSE, PSE: OSG.)

Pacific Power & Light Company

Pacific Power is an electric utility and much more; it is a unique combination of three diverse, yet complementary businesses. 1982's operating income grew 27% to $459 million; 60% came from the cornerstone electric operation and 40% from the expanding telecommunications and coal/minerals units. 1982's revenues were $1.4 billion, up 9%; net income—$197 million, up 17%; —$3.03, up 7%; and dividends per share—$2.16, up 6%.

77



Parker Hannifin Corporation

Parker Hannifin is the industry leader in the fluid power business, supplying over 100,000 products for hydraulic and pneumatic systems worldwide. It serves over 300 markets through 20,000 employees in 246 facilities in the U.S. and 21 other countries. Sales are nearly equally divided between original equipment and replacement markets. Income for fiscal 1982, ended June 30, was $57.7 million or 1 per share on sales of $1.15 billion.

78

Passport Travel, Inc.

Total Revenues:
1977— $3,210,297
1978— $5,672,396
1979— $6,965,843
1980— $8,958,146
1981—$14,326,888
1982—$28,892,436

Passport Travel, Inc. is a major Kansas City based multi-office travel agency and tour operator, owner of 18.7% of the Landmark Hotel in Las Vegas, excluding the casino. Passport Travel has acquired three other travel companies and experienced dramatic increases in total gross /revenues.

79

Pennsylvania Power & Light Company

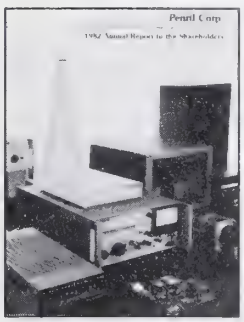
Pennsylvania Power & Light Co. (PP&L) supplies electricity to about 1 million homes and businesses throughout a 10,000-square-mile area in central eastern Pennsylvania. PP&L has a strong generating capability and a diversified fuel mix. In 1982 the company sold about 22 billion kilowatt-hours of electric energy to its customers and about 7 billion kwh to other electric utilities. Company s at the end of 1982 totaled $5.5 billion. Quarterly dividends on mon stock held by the company's 169,000 shareowners were ased from 58 cents to 60 cents per share beginning with the 1, 1983 dividend.

80

Pennwalt Corporation

A worldwide manufacturer of chemicals, health products and precision equipment, Pennwalt introduced a new and patented Pennkinetic™ controlled-release drug delivery system during 1982. This system has been used in Delsym™, a new liquid, non-narcotic antitussive also introduced by the company last year. (NYSE—PSM)

81



Penril Corp.

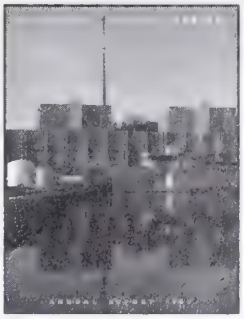
Penril Corp. (AMEX-PNL) designs, manufactures and markets a diversified line of high tech electronic equipment, at 6 profit centers in the United States and Europe. 1982 revenue was $40mm, producing net income of 85¢ per share, with 1,976,214 average shares. 1982 marked the eighth consecutive profitable year. Penril has made nine acquisitions for cash. With the 1983 placement of $18mm Sr. Sub Notes, combined with the Company's $15mm revolving credit line with Riggs National Bank, Penril is now poised for rapidly accelerated growth through further acquisitions and internal expansion. Penril seeks acquisition candidates in the $20 to $50mm revenue range.

82

Perry Drug Stores, Inc.

Our first quarter earnings and sales increased to new record setting levels. Earnings were up 24%, sales up 17%. We operate 118 stores in Michigan, Illinois and Wisconsin. We have not let a stagnant economy deter our growth. We plan in 1983 to open 15 additional stores and to produce a record $280 million sales volume. Our 5-year plan calls for 230 Perry stores in operation by 1987, doing sales of $600 million annually.

83



Philadelphia Electric Company

An investor-owned utility providing electric, gas and steam service in southeastern Pennsylvania and northeastern Maryland for over 100 years. Assets are $7.1 billion. Construction expenditures are planned at about $3.6 billion between 1983-1986 primarily for the completion of two 1,055 megawatt nuclear units. More than 283,000 common shareholders are currently receiving an annual dividend of $2.12 per share. Dividends paid every year since 1902.

84

Pope & Talbot, Inc.

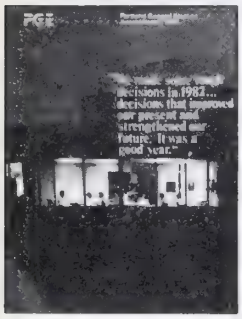
Consumer tissue business helped increase revenues 9% to all-time high $257,715,000 for Pope & Talbot, a major wood products, pulp and paper, timberlands and land management company. Earnings increased 60% over 1981 to 72 cents a share. Operations in Oregon, Washington, British Columbia, Wisconsin, South Dakota. Highly cost-efficient wood products mills well-positioned for anticipated 1983 lumber price upturn.

85

Porta Systems Corp.

Porta Systems is a high technology designer and manufacturer of systems and equipment for the telecommunications industry. The Company is well positioned in this marketplace, currently benefiting from accelerated technological progress and decreasing governmental regulations. Porta has increased its net income from $606,000 in 1980 to $2,469,000 in 1982, while its sales rose from $15.1 million to $23.1 million for the last year.

86



Portland General Electric

Serving Oregon, PGE supplies electricity to over 500,000 customers. A balanced resource mix of hydro, nuclear and coal contributed to 1982 EPS before extraordinary items of $3.02 on revenues of $572 million. Earnings per share were $2.38. Common stock increased 22% in market value in 1982 and yielded 11.4% at year-end. PGE's current annual dividend is $1.74.

87

Premier Industrial Corporation

1982 Annual Report

Premier Industrial Corporation

1982 HIGHLIGHTS

- Record earnings posted for 14th straight year
- Stock split 2-for-1
- Ninth dividend increase since 1975
- Acquired two companies
- Current ratio 4.3 to 1
- Return on equity 22.8%

Premier (NYSE: PRE) develops and distributes repair and maintenance products for the electronics, industrial and fire-fighting markets.

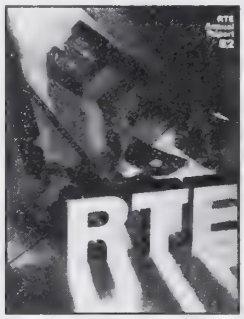
88

Public Service Compan of Colorado

Serving 75% of the 3 million peopl Colorado . . . a growth-oriented st with a diversified economy. Compilin strong balance sheet . . . high cash f . . . good earnings quality . . . strong e gy supply position . . . and no major p construction. Providing a 10.5% yield annual dividend growth of 5% . . . inc and withholding tax benefits on r vested dividends.

Public Service Electric and Gas Company

The nation's third largest combina electric and gas utility, serving ne three-quarters of the population in N Jersey. Assets approximate $7.9 bill Over 230,000 common stockholders currently receiving dividends at the of $2.56 per share annually. PSE&G paid dividends continuously since with consecutive dividend increases the past 7 years. Newark, New Jersey



RTE CORPORATION

RTE has successfully diversified it erations. Once dependent on distribu transformers for the cyclical U.S. ele utility market, the company ha panded its product line, added indus customers and developed overseas kets. Through acquisitions, RTE has become a major electronics firm pr ing components for the high tech in tries. Combined 1982 sales were million. NYSE symbol: RTE.

R.J. Reynolds Industries, Inc.

Record sales and earnings, an incre the annual dividend rate to $3.0 share and the acquisition of Heuble flect the growth and progress achiev RJR during 1982. Whether it be in t co, foods and beverages, shipping, e or packaging, RJR commands a dom or leading industry position. With al three-quarters of our sales now de from food, beverage and tobacco ucts, RJR has become one of the world's foremost consumer ucts companies. To learn more about RJR's 1982 performanc outlook for the future, write for our 1982 Annual Report. (N RJR)

Richardson-Vicks Inc.

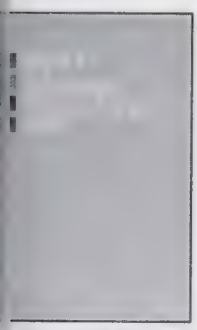
Richardson-Vicks Inc. is a worldwide marketer of consumer care products in the health, personal, home and natural/nutritional care products categories. It also produces specialty chemicals, laboratory reagents and diagnostic instruments. Products include Vicks® colds care products, Oil of Olay® beauty fluid, Clearasil® acne medications, Plus® vitamins, and Formby's® furniture care products. Fiscal 1982 sales were $1,115.6 on; earnings were $66.9 million.

93

Sanders Associates, Inc.

Financial performance again set new records . . . Sales increased 20% to $436.2 million . . . EPS increased 20% to $3.30 per share . . . order backlog increased 69% to $417 million. In computer graphics a variety of new products were introduced, and in our second major business, defense electronics, major production orders were received from government customers. For 1983 we anticipate another year of record sales and earnings.

94



Santa Fe Industries, Inc.

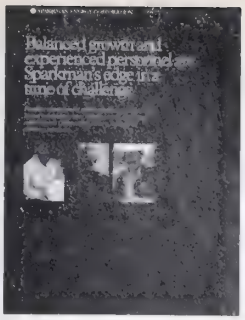
While we are disappointed that general conditions did not improve in 1982, we believe our earnings were reasonable in the light of the recession that refused to relinquish its grip on the nation. Santa Fe Industries is engaged in transportation, including The Atchison, Topeka and Santa Fe Railway, natural resources, forest products and real estate and construction. NYSE symbol: SFF

95

The Southland Corporation

Southland's 7,165 7-Eleven convenience stores had their best year ever in 1982, with 4.4% real growth after inflation in merchandise sales and a 21% gain in self-serve gasoline gallonage. Other operations showed marked improvement. Revenues were up $1 billion to $6.782 billion and earnings were up 16.5% to $108.1 million for the 21st consecutive year of record growth.

96



Sparkman Energy Corporation

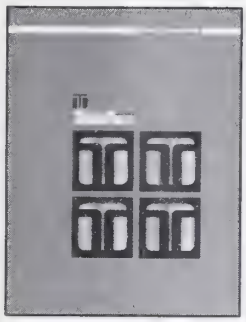
Sparkman Energy Corporation enjoyed a record year in 1982, showing a substantial earnings increase in a year generally considered bad for the energy industry. The company owns and operates natural gas pipelines, performs maintenance, workovers and completion services on oil and gas wells, and explores for and produces oil and gas (SPM on the American Stock Exchange).

97

Sparton Corporation

Sparton Corporation recorded fiscal 1982 as its second best year in the company's 82 year history. Revenues—$118,865,528; Net Income—$5,902,730 ($1.73 per common share); Shareowners' Equity—$41,364,025 (up 10.3%). Sparton Corporation has no long term debt. Continuous dividends since 1962. Sparton engages in Oil/Gas exploration; defense electronics; commercial electronics; automotive, industrial and telecommunications products; and automation machines and systems.

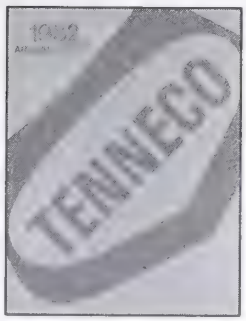
98



Teleflex Incorporated

Teleflex revenues increased for the eighth consecutive year to $112.2 million. Net income grew 54% from $7.1 million to $10.9 million. Return on average shareholders' equity reached 31%. Teleflex is a decentralized company which solves engineering problems by the development and application of specialized technologies.

99



Tenneco Inc.

Tenneco, a diversified energy company, reported record net income of $819 million in 1982. Energy operations continued to contribute the largest portion of Tenneco's operating income. Among its non-energy businesses both shipbuilding and automotive parts turned in record results.

100

The Times Mirror Company

The Times Mirror Company, publisher of the *Los Angeles Times,* is a diversified media communications company engaged in newspaper publishing, broadcast and cable television, book and magazine publishing, information services, art and graphic products, and newsprint and forest products. Revenues in 1982 were $2.21 billion. Net income reached approximately $141 million or $4.09 per share.

101

Transamerica Corporation

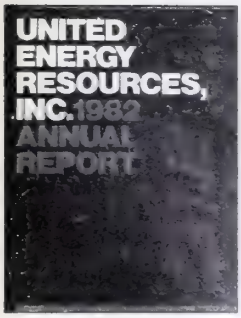
Transamerica is a diversified company with an exceptionally strong position in insurance and financial services. These include life, property/casualty and title insurance operations, risk management services, retail and reinsurance brokerage facilities, consumer lending and equipment leasing. Nonfinancial operations include manufacturing of precision-engineered products and travel services. Earnings in 1983 were $186.2 million on revenues of $4.3 billion.

102

Tyler Corporation

In 1982, for the first time in twelve years, Tyler Corporation (NYSE) did not produce a gain in earnings per share. The economic depression and high interest cost resulting from two major acquisitions were the major factors in a 63% decline in EPS to $1.08. Operations include pipe and fittings, trucking, industrial explosives, specialty chemical coatings and electronic components distribution. Annual dividend rate: $.60 per share.

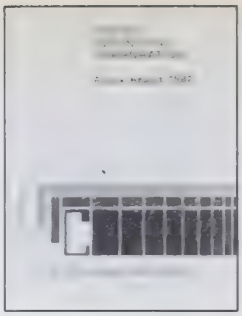
103



United Energy Resources, Inc.

United Energy Resources, Inc. reports 1982 was the second best year in company history, with pre-tax operating income of $366 million. Reflecting the company's strength and favorable long-term prospects, the quarterly dividend was increased February, 1983 from 58 cents to 62 cents per common share. 1982 operating revenues were $5.562 billion.

104

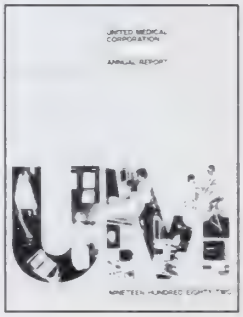


United Industrial Corporation

NEW HIGHS IN 1982
- Earnings up 26%
- Sales up 27%
- Backlog up 17%
- Return on S/H Equity up 23½%

10-year history of consecutive rec sales, earnings and backlog. Principal o ations involve national defense, indu al stokers, and hospital products ma (subsidiary listed on AMEX). Major recommendation, currently, by Me Lynch and Zweig Forecast.

1



United Medical Corporation

UM is engaged in medical services products. The company provides c puterized ECG tape analysis (Holter hospitals and is the nation's largest vider of research analysis to p maceutical firms. The company cond cardiac rehabilitation programs at n than 100 hospital-based centers, operates an accredited cardiac n training school. UM tests pacema telephonically, repairs and maintains bio-medical equipment, manufactures Holter systems, recorders and pacemaker trans ters. The company manages an out-patient renal dialysis unit.

1

Unitrode Corporation

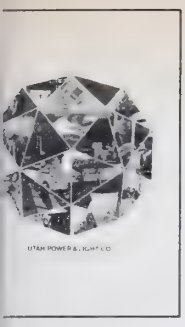
Unitrode Corporation (NYSE-U manufactures products for the high growth, most profitable segments o electronics industry. Its power semi ductors, analog IC's, ceramic capaci data conversion devices and power plies serve the military, computer, communications and consumer mar Sales in the year ended January 31, were $120 million and earnings per s were $2.18, the seventh consecutive of record operations.

1

Universal Foods Corporation

Universal Foods celebrated its center year in fiscal 1982 with record sales earnings. Revenues increased by 14 $496 million and earnings per shar creased by 35% to $2.62. The annua vidend was raised from $.96 to $1.0 share. Universal Foods manufacture world's most diversified line of y products. The Company also prod cheese, soft drinks, dehydrated sea ings, and snack items, and is a national marketer of imported domestic gourmet food products.

1



Utah Power & Light

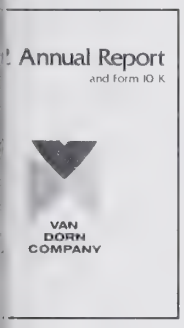
We sit atop some of the world's greatest reserves of low-sulfur coal. It fuels the turbines for about 95% of the electricity we generate. Our 1982 earnings increased from $2.29 to $2.38 per share. Our current annual dividend rate is $2.28 per share.

109

VF Corporation

VF Corporation, a leading worldwide producer of high quality apparel, increased sales in 1982 18% to $880 million and earnings per share 74% to $5.63. Net earnings as a percent of average shareholders' equity were 33.2% in 1982. After giving effect to a two-for-one stock split in December 1982, the annual indicated dividend rate is $1.60. VF Companies are: Lee (jeanswear and casual apparel) and Vanity Fair (women's intimate apparel). NYSE symbol: VFC

110



Van Dorn Company

	Sales (Mils.)	Net Inc. (Mils.)	EPS	Ann. Div.
1982	$184.3	$3.6	$1.28	$1.12
1981	195.2	6.7	2.32	1.03
1980	172.4	6.1	2.01	1.00
1979	193.6	9.1	3.02	.92
1978	178.7	7.9	2.64	.75
1972	89.9	3.2	1.08	.26

An inflation-fighter company. Annual dividend higher 10 years straight, up 300% since 1972. 104 consecutive rly dividends. 111-year-old, balanced manufacturing com- Concentrates in plastic injection molding machinery, special neral line containers, and heat treating of steel. Plants in 8 Puerto Rico, Canada. 2,844,416 shares outstanding. symbol VDC.

111

Varlen Corporation

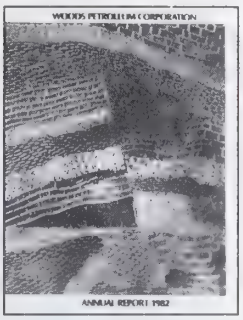
Varlen—The largest non-railroad rebuilder of locomotives, also reconditions locomotives and parts; scraps locomotives; rebuilds diesel engines; one of the largest OEM manufacturers of railroad anchors for track maintenance; cushioning devices for freight cars; rebuilds crankshafts; metals for the bindery industry, fabricates assemblies for furniture manufacturers; constructs, erects storage tanks; equipment for the petrochemical ry. 1982 sales were $108.4 million, earnings were $5.7 million 2 per share.

112

Washington National Corporation

Washington National Corporation is primarily a life insurance holding company with over $3 billion of assets. In 1982 consolidated ordinary life insurance sales increased by 26% to $4.6 billion. Consolidated sales of all life lines totaled $5.8 billion. The Corporation's life insurance in force has doubled over the past five years to more than $24 billion.

113



Woods Petroleum Corporation

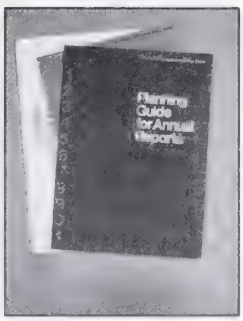
In 1982 revenues were up 16 percent to $83,375,000, earnings increased to $22,981,000, or $1.95 per share. Oil production increased 29 percent to 2,713 barrels per day and gas production rose in 1982 averaging 46,005 Mcf per day. Woods is an independent oil and gas exploration and production company offering public drilling programs. NYSE.

114

Zero Corporation

Zero Corporation reported its eleventh consecutive year of record earnings and has increased its cash dividends each year since 1974. During this period, Zero had six 5-for-4 stock splits, the most recent in March 1983. Zero is a leading manufacturer of cabinets, cases, cooling equipment and packaging hardware primarily for the electronic and computer industries. It also produces the Zero Halliburton line of quality aluminum luggage and camera cases.

115



Potlatch/Northwest Paper

HELP is here!
The Potlatch/Northwest Paper Annual Report Planning Guide. Systematizes the various functions that must all come together on time so your report comes out on schedule—and *under budget*. Gives at-a-glance status of each phase . . . and provides sample forms for each function. Get organized! Send today for your *free* copy.

116

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Please circle on one of the insert cards on the adjoining page the number of each company listed below whose annual report you would like to receive.

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5. Allis-Chalmers Corporation
6. American Brands, Inc.
7. American Business Products, Inc.
8. American General Corporation
9. American Medical International
10. Amfac, Inc.
11. Avery International
12. Baldor Electric Company
13. BancTEXAS Group Inc.
14. Bank of Montreal
15. Bayly Corp.
16. Blue Ridge Real Estate Company
17. Brush Wellman Inc.
18. Bucyrus-Erie Company
19. CP National Corporation
20. CSX Corporation
21. Central Reserve Life Corporation
22. Chesebrough-Pond's Inc.
23. Chieftain Development Co. Ltd.
24. CIGNA Corporation
25. Coachmen Industries, Inc.
26. Cole National Corporation
27. Community Psychiatric Centers
28. Comp-U-Check, Inc.
29. Consolidated Freightways, Inc.
30. Cronus Industries, Inc.
31. Decision Data Computer Corporation
32. Dennison Manufacturing Company
33. EDO Corporation
34. El Paso Electric Company
35. Emery Worldwide
36. Family Dollar Stores, Inc.
37. Ferro Corporation
38. First Interstate Bancorp
39. FlightSafety International, Inc.
40. Gannett Co., Inc.
41. Gearhart Industries, Inc.
42. Genetic Systems Corporation
43. Georgia-Pacific
44. Golden Triangle Royalty & Oil, Inc.
45. Grove Explorations Ltd.
46. Grow Group, Inc.
47. Gulf Energy Corporation
48. Hadson Petroleum Corporation
49. Frank B. Hall & Co. Inc.
50. Harsco Corporation
51. HON INDUSTRIES
52. House of Fabrics, Inc.
53. IU International
54. InterNorth, Inc.
55. Iowa Resources Inc.
56. Ivaco Inc.
57. JWT Group, Inc.
58. KDI Corporation
59. Knight-Ridder Newspapers, Inc.
60. Koppers Company, Inc.
61. La-Z-Boy Chair Co.
62. Lifemark Corporation
63. Liquid Air Corporation
64. Masco Corporation
65. Matrix Corporation
66. Media General, Inc.
67. Michelin Tire Corporation
68. Minnesota Power
69. Morehouse Industries, Inc.
70. Morrison-Knudsen Company, Inc.
71. Movie Systems, Inc.
72. Niagara Share Corporation
73. NICOR Inc.
74. Northwest Energy Company
75. Ohio-Sealy Mattress Manufacturing Co.
76. Overseas Shipholding Group, Inc.
77. Pacific Power & Light Company
78. Parker Hannifin Corporation
79. Passport Travel, Inc.
80. Pennsylvania Power & Light Company
81. Pennwalt Corporation
82. Penril Corp.
83. Perry Drug Stores, Inc.
84. Philadelphia Electric Compan
85. Pope & Talbot, Inc.
86. Porta Systems Corp.
87. Portland General Electric
88. Premier Industrial Corporatio
89. Public Service Company of Colorado
90. Public Service Electric and Gas Company
91. RTE CORPORATION
92. R.J. Reynolds Industries, Inc.
93. Richardson-Vicks Inc.
94. Sanders Associates, Inc.
95. Santa Fe Industries, Inc.
96. The Southland Corporation
97. Sparkman Energy Corporatio
98. Sparton Corporation
99. Teleflex Incorporated
100. Tenneco Inc.
101. The Times Mirror Company
102. Transamerica Corporation
103. Tyler Corporation
104. United Energy Resources, Inc.
105. United Industrial Corporation
106. United Medical Corporation
107. Unitrode Corporation
108. Universal Foods Corporation
109. Utah Power & Light
110. VF Corporation
111. Van Dorn Company
112. Varlen Corporation
113. Washington National Corporation
114. Woods Petroleum Corporation
115. Zero Corporation
116. Potlatch/Northwest Paper

Has Toro, the classic concept stock, pulled off the classic turnaround? Not quite yet.

Another mile to go

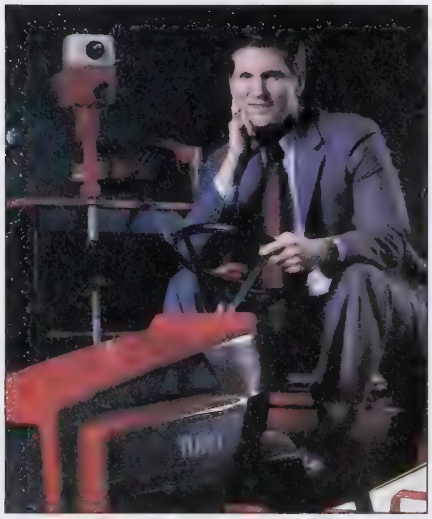
By Jill Andresky

You remember Toro. The perfect concept stock. It sells snowblowers in the winter and lawn mowers in the summer. Back in the late Seventies it was one of the hottest growth stocks around (Forbes, *Nov. 27, 1978*). Under CEO David McLaughlin—now president of Dartmouth College—sales went from $130 million in 1975 to $360 million four years later, while earnings growth averaged 80% annually.

But in 1980, as sales reached $400 million and the $1 billion mark beckoned, Minneapolis-based Toro's luck ran out, and for seemingly the most predictable of hazards: two mild winters in a row, which collapsed snowblower sales from $130 million in 1980 to $6 million in 1982 and left the company sitting atop a mountain of inventory.

"We needed a more conservative approach," admits Ken Melrose, the third-in-command who rose to the presidency after President Jack Cantu left and McLaughlin went off to Dartmouth. "We were rather opportunistic in the Seventies." Opportunistic? Overweening ambition is another way of putting it. "You had a billion-dollar management back then," says one observer, "running what was a $200 million company."

Not that Toro did not try to meet the emergency. But new problems—or, as Melrose, an avid white-water raftsman, likes to term them, "hidden rocks"—kept cropping up. When the company tried to extend its distribution into mass merchandisers such as Penney and Zayre, it succeeded only in antagonizing its traditional network of independent distributors and dealers. When it brought out a new line of products aimed at the lower-priced end of the lawn mower and appliance market, they were not up to par—dangerous for a company that had built its name on quality.



Toro President Ken Melrose
Too conservative now?

Under such burdens, another company of Toro's size might well have gone bankrupt. But Toro's board includes such well-connected Minneapolis luminaries as David Lilly, former member of the Federal Reserve Board and now dean of the University of Minnesota's school of management; Stephen Keating, former CEO of Honeywell; and Mark Willes, chief financial officer of General Mills. With their help, Melrose negotiated credit lines worth $100 million good through 1983.

Then he started pruning. He slashed operating expenses by 30% and the work force from 4,000 to 1,700. He temporarily closed Toro's six snowblower and lawn mower plants. All that is now beginning to show results. In its second quarter Toro rang up its first profit—10 cents a share—in the last 11 quarters, and for all of this year it should at least break even on about $200 million in revenues. Those bloated inventories have been reduced from a three-year to a one-year supply.

On the face of it, the market fundamentals also look good; both lawn mowers and snowblowers stand to profit from pickups in housing and consumer durables. And last month the company registered 900,000 new shares of common, which will raise probably $10 million in order to help clean up the balance sheet (its total debt of $65 million is now over 50% of total capitalization).

So is Toro over the hump at last? Not if there are more hidden rocks down there, and there may well be. For one thing, new government regulations could be a big barrier to any recovery in the consumer lawn mower market. They may add $30 to $50 to Toro's already pricey models. Moreover, tight municipal budgets around the country may mean that Toro cannot look for help in its commercial business—mowers and irrigation equipment for parks, golf courses and schools.

Then there is the competition. As a tiny independent up against the likes of Textron, Emerson Electric and Sears, Toro has always relied on its name and hometown connections. But now it faces a formidable competitor in Honda, which moved into the consumer lawn mower market in 1981. Toro's products are mostly in the premium end of the market, so it may be vulnerable to Honda, whose reputation is also excellent but whose production costs are lower and financial resources greater. Yet in the teeth of this threat, Toro's advertising was down almost 35% last year. And in its zeal not to load down snowblower distributors with inventory, it plans to provide them with only $50 million worth—about half the sales of the lawn mower and commercial lines last year. In short, Melrose may be playing it too conservatively now.

Rumors last fall of a potential takeover—one name mentioned was Emerson Electric—drove Toro's stock from around 5 1/2 to about 11, where it was trading recently. Issuing 16% more shares may make sense as a defensive move; Melrose is on record as saying Toro wants to remain independent. But whether it is in the shareholders' best interests is another matter. Melrose was probably smart to bring the stock issue to market now. Six months from now, investors might conclude that the problems at Toro are far from over. ■

Shopwell is trying to turn ordinary supermarkets into gourmet stores for the masses. So far it seems to be working.

Truffles, anyone?

By Aaron Bernstein

After years of dragging along with Shopwell, Inc. as a little-regarded, low-profit or no-profit supermarket chain in the metropolitan New York City area, the Rosengarten family, which owns 30% of the stock and runs the shop, knew it had better change. But how?

They took a close look at what they had. "We saw that upscale marketing was not being done in New York," says Glen Rosengarten, executive vice president of operations. New Yorkers will think of Zabar's, Balducci's and others, but Glen is talking supermarkets. "A niche that was not being properly addressed," he says. "And our stores were already located in some nice neighborhoods."

So, beginning in 1979, Glen, his father, Martin (the CEO) and brother Jay (the chief financial officer) launched a major overhaul. They christened each remodeled store The Food Emporium, called in consultant Len Schechter, put ties on the clerks and filled the shelves with items normally found only in gourmet shops. They now have 13 Emporiums and have upgraded 3 of the 67 other stores in the chain. Four more Emporiums are scheduled this year.

So far, the gamble that people will pay more for real quality seems to be paying off for the Rosengartens. Earnings, in deficit in 1974 and 1975, moved from $0.46 a share in 1978 to $2.18 in 1982. Sales since 1978 have almost doubled, from $272 million to $477 million. And return on equity is a respectable 13.9%.

The idea of The Food Emporium, says Glen, 35, is to put regular and specialty selections on the same shelves rather than confine the good stuff to the tiny gourmet corner added by most supermarkets years ago. Nor is that all. Tanks of live fish are installed, imported cheese sections opened, full-time butchers hired to cut meat on demand, the produce departments filled with $17-an-ounce

Glen Rosengarten (left) *and Jay Rosengarten at a Manhattan Food Emporium*
There is a mass market, after all, in kiwi fruit and live trout.

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French truffles, kiwi fruit, Belgian endives and a fresh salad bar. "Look at those beautiful organically grown tomatoes," says Glen Rosengarten lovingly, as he proudly ushers a visitor around a Manhattan Food Emporium. "What other supermarket would give you 5 kinds of apples or 75 kinds of mustard?"

Moving such pricey goods in volume took a lot of education—of both employees and customers. Says Len Schechter of Claridge Marketing Association, "Ask somebody in the supermarket aisle the difference between sockeye salmon and pink salmon, and they won't be able to tell you. This kind of thing requires a better-educated clerk and a higher degree of service."

To teach the customer, each Emporium gives as many as three demonstrations a week. Chefs are brought in to demonstrate a fancy recipe, give a talk and pass out samples of exotic cheeses. Pamphlets and letters tell shoppers everything from how to care for Romanoff caviar to the history of croissants or how to choose the right coffee beans.

It was an education for the Rosengartens, too. Rather than buying in bulk at the cheapest price, as most supermarkets do, Glen and Jay had to learn to think like small specialty grocers. They toured the country, looking for the kinds of items they needed and teaching themselves about food as they went.

Shopwell still has a way to go. Its profit-to-sales ratio, which was an almost unmeasurable 0.1% when the company returned to profitability in 1976, jumped to 0.6% last year.

But that's still low compared with the national average for larger chains, which is 0.88%. And the price for Shopwell's new image has been steep: about $31 million in the past four years, largely paid for through finance leases that have been capitalized on the balance sheet as long-term debt. The debt-to-equity ratio, including leases, has dropped from a 1980 high of 2, down to 1.68 last year. But that's still high in the industry.

Says Jay Rosengarten, "Obviously there is a conflict between our operating enthusiasm and what we can prudently afford to do. In the last three years we have moved to strengthen the balance sheet."

The three upgraded stores cost about $1.6 million each. The Emporiums cost more. Turnaround time can take up to 15 months, compared with the 9 to 12 months it usually takes to open a supermarket. Because Emporiums have a much greater percentage of high-margin items, they make significantly higher gross margins. And sales in the least successful converted store have nearly doubled.

The Rosengartens' newfound sense of market identity did not come without false steps. In 1974 Shopwell tried to expand into Massachusetts and Vermont. For two years the seven stores there dragged the company into deficit earnings, and they were sold at an $800,000 loss in 1976.

"We made some basic errors there," admits Martin Rosengarten. "But it taught us to build on our base as a regional chain."

The new Rosengarten strategy is already being tried by such food stores as Safeway, Grand Union and King Kullen, so Shopwell can't afford to let the grass grow under its feet. It still has 53 unconverted stores, and Gothamites pushing shopping carts down dingy aisles in those "nice neighborhoods" are eventually going to have upscale alternatives, whether the Rosengartens are the first to provide them or not. ■

You can say this for James McSwiney: He has made Mead Corp. takeover-proof.

White paper drenched in red ink

By Jean A. Briggs

When James McSwiney retired last April as chairman of Mead Corp., shareholders at the annual meeting gave him a standing ovation. Vice Chairman C. Greene Garner proclaimed that McSwiney had had more influence on the company than anyone since founder George Mead.

It was a touching tribute to McSwiney's success in keeping Mead independent in the face of a takeover bid by Occidental Petroleum, but McSwiney was certainly leaving incoming Chairman and Chief Executive Officer Burnell Roberts with his hands full.

Not only have Mead's earnings fallen precipitously, but both Moody's and Standard & Poor's have lowered the company's credit ratings. Dayton-based Mead lost $85.8 million, or $3.29 per share, last year, its first loss since 1938. In the paper industry only Crown Zellerbach lost more, and it had been a profit laggard for years. What a comedown. In 1979, the peak year, Mead made $141 million, or $5.19 per share. The credit rating is down from A at S&P's to BBB+.

What happened to Mead Corp.? When last in the public eye in 1978, it was considered a well-run company—it ranked fourth among forest products companies in The Forbes 1979 Report on American Industry. But after the takeover battle, things seemed to go wrong. In January 1980, McSwiney's designated heir, Warren Batts, suddenly resigned. He was not unemployed for long, emerging only eight months later in a far bigger company. He is currently president of $9.9 billion Dart & Kraft.

McSwiney now took the company on a spending spree. He announced a $1.5 billion capital spending program. He piled on the debt to boost capacity 47% in coated paper, 30% in uncoated paper and 13% in pulp.

But in the late Seventies returns in the white-paper business were unsustainably high and the result was predictable. Competitors also rushed to add capacity and saturate the market. "The profitability of the white-paper business probably won't be as high as it was in the late Seventies in the foreseeable future," says Paine Webber analyst Lawrence Ross.

The timing, in short, was terrible. McSwiney won't talk. Director

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Mead's present (left) *and past chairman* ***Burnell Roberts must clean up after James McSwiney's heroics.***

Thomas B. Stanley Jr., one of the few people associated with Mead who spoke to FORBES, gave us the official line: "We wanted to improve the cost-effectiveness of our plants and to increase our market share." One observer who requests anonymity says, "McSwiney wanted to be a hero, and to him that meant building or acquiring." Skeptics suggest that McSwiney was using all that debt as a form of shark repellent against further takeover bids.

Burdensome expansion amid deep recession was not the only problem McSwiney left behind. At the top of the list was a seriously mishandled antitrust suit about price-fixing in the corrugated container market. McSwiney had refused to settle out of court and Mead had been convicted in one case. Because the other 36 companies involved in the suit had settled out of court, Mead could have been fined triple the damages inflicted by all the companies, which might have added up to hundreds of millions of dollars.

With McSwiney gone, his successor Roberts has sensibly agreed to a $45 million settlement. The other companies got away for an average of $9 million each.

The list of Mead's troubles is a long one. McSwiney had made acquisitions. He bought Gulf Consolidated Services, which sells pipe, valves and electrical supplies for refineries and petrochemical plants. He bought Murray Rubber, a manufacturer of rubber products for the oil-tool industry. He bought Lynchburg Foundry, which makes precision castings for the auto, truck and farm equipment industries. Together they lost $51 million last year.

There is one area of acquisition where McSwiney may yet be vindicated. He made promising buys in such technologically advanced businesses as database management, ink-jet printing and toxic substance analysis. But these are as yet only 3% of sales and probably not yet profitable.

Looming over everything now is Mead's debt, up from 45.8% of total capital at year-end 1981 to 58% at year-end 1982, including joint-venture debt. Says Kevin Morley, Standard & Poor's paper industry analyst, "That's high for a forest products company rated BBB+. We're looking for their markets to start to rebound. If they don't by midyear, we will have to reconsider the rating." Which has already been lowered, remember.

The company has been seeking desperately to raise money. In the third quarter it sold $75 million worth of 15⅞% notes and put a coal subsidiary on the block. It raised another $92 million elsewhere. In September it registered with the SEC $250 million of notes it has yet to bring to market. And it sold commercial paper until the fourth quarter when, as Goldman, Sachs, its investment banker, carefully phrases it, "We met with the company and suggested that the commercial paper market was no longer appropriate for them."

Now the pipe and valve business and the precision-casting business are for sale. The company won't confirm it, but word is out that it is also looking for a partner for the ink-jet printer business.

Even granting that white-paper consumption will grow along with the recovering economy, Roberts' company will remain under great financial pressure. Mead has sizable capitalized interest and depreciation costs that it must start expensing, thus keeping a lid on earnings. Paine Webber's Larry Ross expects red ink through the first quarter and no more than 60 cents a share for the year. The dividend, already cut in half, is still not safe. The applause at McSwiney's departure has an ironic ring. ■

A Forbes Special Advertising Supplement

DOING BUSINESS IN MARYLAND

A CEO's POINT OF VIEW

row: Paul G. Miller, Commercial Credit Company; Jerome W. Geckle, PHH Group, Inc.; Harry Hughes, Governor; Moseley, USF&G Corporation. Standing: Henry A. Rosenberg, Jr., Crown Central Petroleum Corporation; Ronald esey, Citicorp Financial Inc.

Invitation from the Governor of Maryland

ou are invited to experience Maryland ugh the words of five chief executive offi- from our fast-growing service sector. ices are more in demand than ever before will continue to prosper in Maryland. ne returns on our investment in the market- of Maryland to business and industry have , and continue to be, extraordinary. Last alone we attracted nearly $1 billion in new tal investment through industrial and com- cial growth. This is the highest level per ta in the country.

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Sincerely,

Harry Hughes

Harry Hughes
Governor

The Forbes Maryland Supplement was written by Ted Shelsby.

Paul G. Miller
Commercial Credit Company

Commercial Credit Company, a worldwide organization offering financial, insurance, computer and realty services to businesses and consumers, makes Maryland its home.

Founded in Baltimore in 1912, the company has become one of the giants of the financial service industry.

Commercial Credit started with $300,000 in borrowed capital. Now a subsidiary of Control Data Corporation, Commercial Credit reported net earnings of $50.2 million in 1981 and listed total assets of $5.2 billion.

Paul G. Miller, the 60-year-old chairman and chief executive officer of Commercial Credit, attributed a portion of the firm's success and growth to its Maryland location. The central East Coast location, said Miller, offered the young company a good concentration of potential customers. "This is still a good reason for us to stay here today," he stated.

"It's also nice to have our headquarters in a state that is fiscally sound," Miller noted.

"Additionally," he said, "Baltimore is a large financial center in its own right, offering a complete range of financial incentives to Maryland business and industry. There are several good-sized, well-managed regional banks. Then there are Alex Brown and T. Rowe Price; investment banking and stock brokerage are well-represented."

Miller noted other advantages to being in Maryland.

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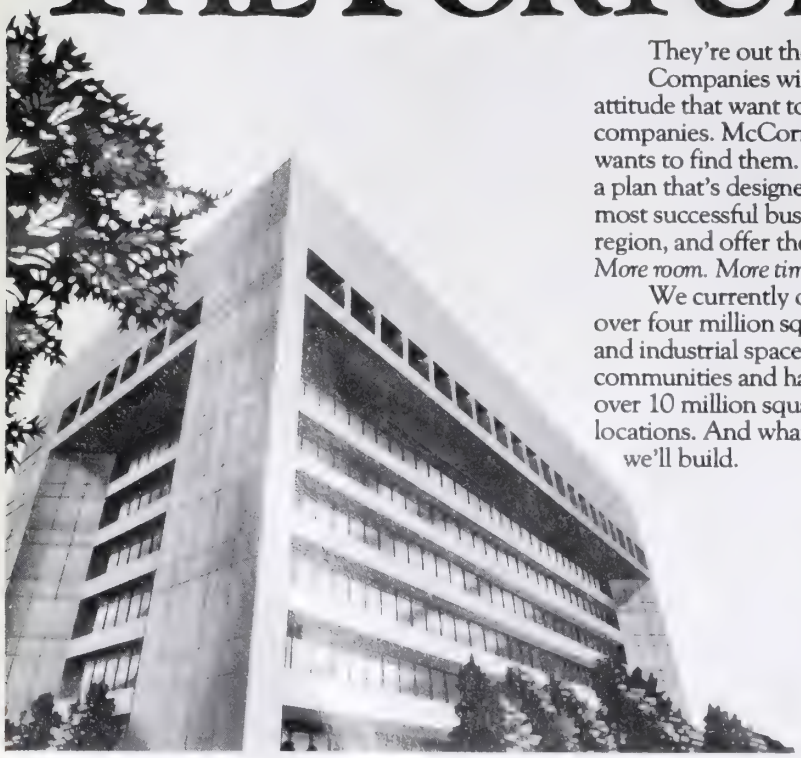

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Maryland has struck a nice
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Miller expressed satisfaction
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I think a very, very strong
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a company."
Miller also cited Maryland's
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for firms that have to visit
financial community there.
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Miller, "you can do a day's
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e without it being a big chore.
same with Washington."
terms of attracting and keep-
employees, Maryland offers a
variety of possible lifestyles.
dential accommodations
ge from the many metropoli-
options to rural locations, to
planned city of Columbia—
t by local developer, Jim
se—to towns rich in history,
as Annapolis.
Miller said his waterfront home
White Hall Creek, just a few
s from downtown Annapolis,
delightful, quaint and his-
place."

Jerome W. Geckle,
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CHESAPEAKE COUNTRY

some rare exceptions, they are sometimes a little too relaxed."

"The tempo in New York and Boston is, perhaps, a little overwhelming. Sometimes you don't really have time to think things through."

"In Maryland," said Geckle, "I think we have a good blend of the two styles. Our people are thrown into these high-tempo business centers on a regular basis, but we always come back to our shelter in Maryland to think things through and organize ourselves."

This freedom to carefully consider all options at a reasonable pace may have had something to do with PHH's success. Despite its deep involvement in the volatile automotive and housing industries—fleet management and relocation services—the firm has chalked up 24 consecutive years of increased earnings.

PHH Group continues to grow at an annual rate of almost 20 percent. Net income tripled between fiscal 1978 and 1982 while revenues increased 230 percent from $143 million to $472 million.

From its headquarters in Hunt Valley, PHH manages the automotive fleets of more than 800 corporate clients. With more than 236,000 vehicles under its management, PHH is General Motors' largest single customer. The Homequity division of PHH is America's leading relocation service company.

According to Geckle, Maryland's attitude towards new business was helpful to Duane Peterson, Harley Howell and Dick Heather when they founded the firm of Peterson, Howell & Heather, Inc., in Baltimore more than 35 years ago.

"They had a lot of support from people in local firms like Alex Brown & Sons, the nation's oldest investment banking firm. We have some very supportive financial institutions in this area that go beyond what you find in some of the national banks to help new businesses."

"Over the years, things have not changed much," Geckle said. "We still receive substantial support from the local financial institutions and Brown remains one of our primary investment bankers."

This support goes beyond the private sector. Geckle said he has found Maryland governor Harry Hughes willing to listen to the problems of businesses and committed to seeking solutions. And Mayor Schaefer doesn't miss an opportunity to promote Baltimore as a good place for business.

"Maryland," Geckle continued, "doesn't deprive a business of anything. We have communications capabilities out of this area as good as or better than any other place in the country. We are close to most of the business centers. We're within a couple of hours of New York and on the doorstep of the nation's capital."

"We're on a roll, now," said Geckle."The revitalization of Baltimore's inner harbor region—with the National Aquarium, Harborplace retail complex, new convention center, hotels and office buildings—is the kind of development that creates excitement and the momentum for even more growth in the future."

Henry A. Rosenberg, Jr.
Crown Central Petroleum Corporation

Just about the time Henry Ford was making the big change from the Model T to the Model A, Crown Central Petroleum Corporation put down its roots in Maryland.

The petroleum products refining and marketing firm "was ori inally here," said chairman and chief executive officer Henry A. Rosenberg, Jr., "because my fam ily—the majority stockholder—lived here. But," he continued, "we're in Maryland today becaus it's prudent for us.

"The state has a good philoso phy on trying to retain business said Rosenberg. "Under the lead ership of governor Harry Hugh Maryland became a more pro-business state. Harry knows bus iness. His thinking and attitude toward business are very positiv He is very active in this area."

Rosenberg finds it convenient to be close to the nation's capital and not very far from New York "The ability to get to Washingto so easily makes transacting bus ness a bit less hectic. Crown, bei in the oil business, has to deal w the regulatory agencies from ti to time. It's convenient for our p ple to make the short train trip."

Rosenberg praised the company's employees. "They are the most important part of the company. It is important for us to select carefully the people who work for us. You get a fine quali employee here, well educated an well prepared. We fill just about of our needs from people right i the area."

Rosenberg was quick to note another advantage of the area: " terms of educational opportunities, I think we have a lot to offe Maryland is recognized for its

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many prestigious universities.

Crown draws heavily upon the advantages Maryland offers business, but also prides itself on giving something back to the community. Rosenberg serves on the boards of a dozen Baltimore area civic and educational organizations and the company throws its financial support behind a number of city projects.

"Crown has a philosophy," said Rosenberg, "that if you live, do business and make money in an area, it's the obligation of the company to give something back to the community, either in dollars or time."

Ronald E. Geesey
Citicorp Financial, Inc.

"Initially, we came to Maryland by accident," said Ronald E. Geesey, president of Citicorp Financial, Inc.

Citicorp Financial, Inc. is the rapidly growing credit card processing and financial service subsidiary of Citicorp. It was established in the Baltimore area in the late 1970s after its parent company purchased a Maryland credit card company.

From its offices in Towson, a northern suburb of Baltimore, Citicorp Financial handles the complete credit operations of several department stores. The company also processes the accounts of its more than 450,000 Choice credit cards and of the 15,000 regional merchants who accept the card. "Some of our business," said Geesey, "could very easily have gone to other locations. Why keep it in Maryland? There are a number of reasons.

"First, this has been a fertile place to grow," he said. The firm's Choice card business has grown about 250 percent between its 1980 launch and the end of 1982.

Geesey cited Maryland's workforce among the most pro-

The Atlantic at dawn—Ocean City.

COMSAT IN MARYLAND

COMSAT Laboratories is the scientific and technological foundation of the Washington D.C.-based Communications Satellite Corporation. It is at this research and development center that new and innovative ideas are conceived and realized. COMSAT Laboratories, located in Clarksburg, Maryland, is the only facility of its kind in the world devoted exclusively to the advancement of satellite communications technology.

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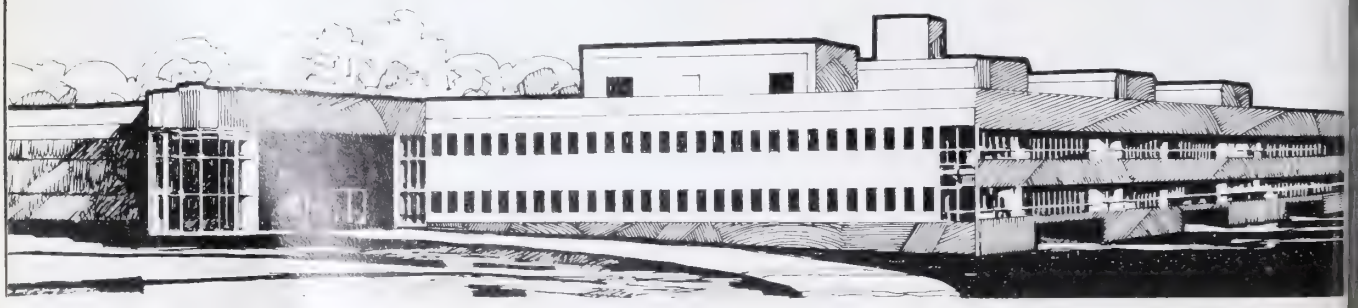

esapeake Bay seafood feast

ductive in the nation. "We get good quality help in Maryland at a good price. There are other operations in which the production rates are only 80 to 75 percent of what we get."

"The credit card business," Geesey explained, "is fundamentally a processing business. In a sense, it's like a manufacturing business. We are manufacturing a service. Production rates are very, very important to us."

Citicorp Financial employs more than 600 people and is growing. "As we grow we don't have to import many people to fill positions," said Geesey. "People here are very trainable."

Geesey feels that Maryland has time on its side in an added, more subtle, sense.

"The thing I like best about living in this area is the short commuting time to work," he said. "I've given as much as three hours a day to commuting in New York and London. I now give 16 minutes a day to commuting. This time saving is the greatest advantage to living in the Baltimore area."

Geesey noted that being close to home also makes him more accessible to his family.

Geesey admits to working too hard. Unlike some of his colleagues who escape by sailing on the Chesapeake Bay or by skiing in Western Maryland, Geesey seeks out the relaxed atmosphere of Maryland's Eastern Shore.

"Talk about great escapes—you can leave Baltimore and be in rural Southern Maryland or on the Eastern Shore in about an hour and a half, yet it's like being in another world."

Jack Moseley
USF&G Corporation

Jack Moseley, the 51-year-old chairman and chief executive officer of USF&G Corporation, speaks

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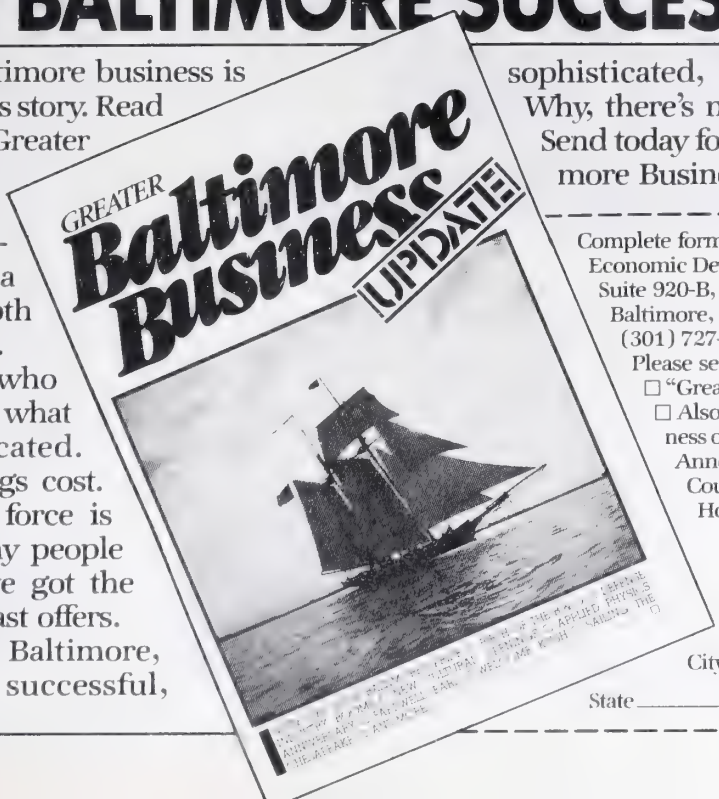

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glowingly of Maryland. His voice has a trace of the Alabama accent he brought to Baltimore 27 years ago. "No other city in the country appeals to me nearly as much as Baltimore. It offers everything. I couldn't possibly overstate the quality of life here—the museums, the symphony, professional sports, good theaters for Broadway plays—Baltimore has it all."

"In addition," he said, "we have the Chesapeake Bay. Although the insurance executive has enjoyed the excitement of trolling for rockfish on the bay, he sees it as an economic resource. In terms of container shipments, it's the second largest harbor on the East Coast.

"We are 150 miles farther inland than Norfolk and not as congested as Philadelphia. For things brought in or shipped out, there are better rail systems out of here than any other city from New York to Miami. If you're shipping a product," said Moseley knowledgeably, "that 150 miles is important. You don't want to take it off the ship and put it on more expensive rail cars one minute before you have to."

Maryland is also strategically located for overland transportation, with overnight truck access to 30 percent of the nation's population and to a third of America's manufacturing establishments.

The company has made Baltimore its home since its founding in 1896. In the late 1960s, the fast-growing firm was faced with the need for a new corporate headquarters building. The company chose to erect a 35-story building in Maryland, which was the first construction in Baltimore's inner harbor development and cornerstone of one of the world's most successful inner-city redevelopment efforts.

"This is a city where I'm very much interested in staying. I ar the eighth chairman and, starti with the founder, it never occurred to anybody to try to move."

According to Moseley, Baltimore also has an advantage in construction costs. "It would ha cost us considerably more to ha our new building erected in Ne York, Boston or Philadelphia and would have cost as much in Richmond. And it's harder to get in and out of Richmond tha Baltimore."

Moseley feels a city is a reflec tion of its citizens and business leaders. "I find the other busine men in the city are as interested community affairs as I. We mee on common ground. We want t city to work, and work well. Wl a group of people that works w gets together, that can make th day very, very pleasant."

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hat's not a promise we take lightly. fact, telling more than 2,000 corpora-ons to mind their own business has een good business for us and very rofitable advice for our clients.

The pressures on profits for most cor-orations in America have been tre-endous. Never before has controlling osts become such a major corporate ojective. Still, chief executives from any of our clients have told me that is is not the time to reduce the empha-s on sales and service. In today's nvironment, it's critically important to ave the right person in the right place get a difficult job done. They need mely decisions and productivity mea-ires that produce bottom line results.

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Employee relocation is one of the most costly and difficult problems faced by corporations today. Knowing how to ease the burden of relocation for the transferee while controlling the costs for the employer calls for real knowledge and experience. That's why Homequity, a PHH Group Company since 1971, has grown so rapidly. Today, Homequity is the largest company of its kind in the world. We've helped over 450 major corporations relocate more than 275,000 families.

Corporations handling their own employee relocations know only too well how costly it is. Appraising, buying, selling, managing, and finding homes are complex and expensive tasks. Most corporations don't want to dedicate their best talent to coping with these problems. The professional assistance Homequity brings to each relocation reflects itself in greater employee productivity as well as substantial overall cost savings.

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This is a new service for PHH Group, but with the recent acquisition of Executive Air Fleet, the leader in business aircraft management, we're long on experience. EAF is a natural fit with PHH Group and an important addition to the other services we offer our clients. The difficulties in commercial aircraft services make EAF's programs for saving companies time and money through chartering, management and brokerage services a logical and exciting addition to the PHH Group family of business services.

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I've heard more than once that the service industry will be the fastest growing segment of American business in the decade ahead. I couldn't agree more. As a Company with revenues that will exceed $500 million in our 1983 fiscal year, we're well prepared to be a leader in helping shape the future for business services. Certainly we're excited about what we see happening in Maryland and proud to be one of a number of leading corporations located here. For more information on how we feel about business services in the 80's or for help in solving problems in your business, write to me, Jerry Geckle, Chairman, PHH Group, 11333 McCormick Road, Hunt Valley, Maryland 21031.

Jerome H. Geckle

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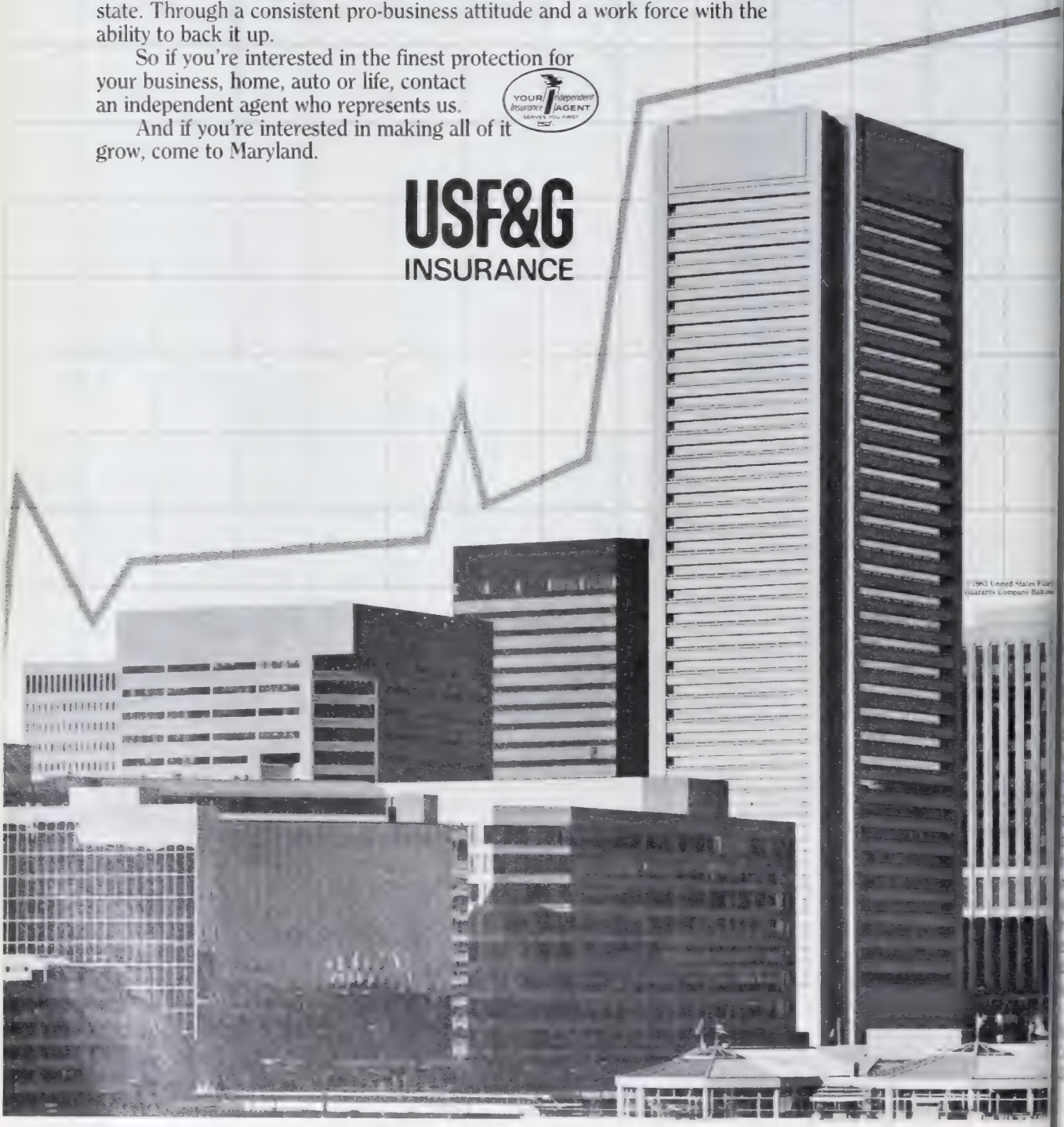


Rich Products Corp., the outfit that brought you nondairy creamer for your coffee, is springing yet another great advance on Western civilization.

All in the family

By Jonathan Greenberg

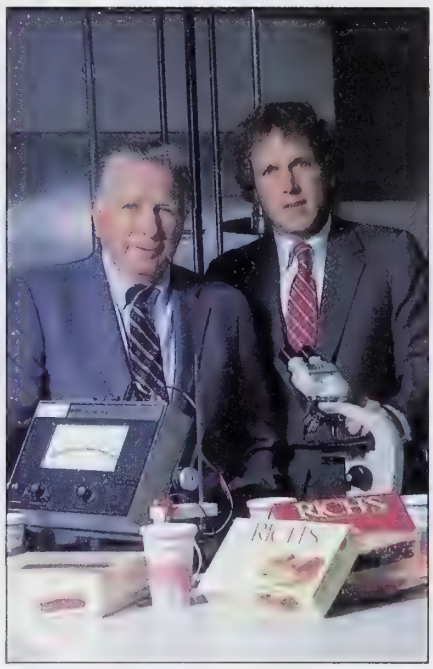
ROBERT RICH pioneered the nondairy dairy industry with soybean-based whipping cream nd coffee cream that isn't really ream. For nearly 40 years privately wned Rich Products Corp. has orked this niche profitably. Now ich's son, Bob Jr., president, has lans to bring Rich out of the niches s a fully diversified food company.

He has already made a start. Rich roducts has quadrupled its sales over ne past seven years, to $400 million ist year, with earnings approaching a ealthy 4% of revenues. More impor-int, about half of that $400 million as from nondairy replacement prod-cts, compared with about 71% in 975. That's only the beginning, says ob Jr. His goal is to diversify into all reas of prepared foods, including fro-en seafoods, fruits and specialty neats. Rich Products will be a $1 bil-on company by 1986, he says, and ltimately "one of the major food pro-essing companies in the world."

Bob Jr. is hoping Rich's new Freeze lo technology will provide a big oost. The process replaces some of ne free water molecules in a product ith other naturally occurring mole-ules like sugar and salt. The remain-ng water becomes bound to these olecules, so that the product re-ains soft at temperatures lower than ne freezing point of water. This eans that substances containing uantities of sugar, such as frozen uit in pie fillings, can be eaten right ut of the freezer without being awed. "Frozen doesn't necessarily ean hard," says Bob Jr.

Will Freeze Flo ever match Rich roducts' most successful product, offee Rich? If it does, the company is l ready to cash in. It holds 39 patents on the process, which it says cost nearly $5 million to develop. So far, it takes in $2.5 million a year licensing the process to 50 companies. Most of them are in Europe, rather than in the U.S. Rich contends that American companies are embarrassed because his small company beat them to it.

Rich has another key strategy, acquisitions, which operates in an unusual way. It seems to work. Bob Sr. and Bob Jr. try to select other companies that are also run by father-son teams. "We come along as a viable alternative to the public companies," says Bob Sr. "They can still operate their business and not have the rug pulled out from under them if anything should happen." All Rich takeovers are friendly, he says, and most owners stay on afterward because the all-in-the-family policy practically turns them into in-laws. "This violates a lot of rules of the big public companies," says Bob Jr., "but nepotism works."



Rich Products' Robert Rich Sr. and Bob Jr.
"Nepotism works."

Robert Sr., now 69 and Rich Products chairman, stumbled onto the secret of nondairy replacement back in 1945 while trying to find commercial applications for what he had learned about product substitution with the War Food Administration during World War II. For the long train ride one day from Buffalo to a distributor on Long Island, he packed some of his new soybean-based "whipping cream" in dry ice to keep it cool. He didn't intend to freeze it, but when he arrived he found it frozen solid. Desperately he mashed it up and found that it still whipped perfectly. That, says Rich, was the beginning of the frozen nondairy products industry—an industry that Rich Products Corp., still based in Buffalo, has dominated ever since.

Rich was also shrewd enough to position his company as a supplier to the food-service sector, the part of the industry that services restaurants, hospitals, schools and the like, rather than supermarkets. The long storage life of his products, he reasoned, would appeal more to cost-conscious food-service operators than to taste-conscious consumers. And instead of competing head-on with General Foods-type conglomerates in ad-influenced retail markets, Rich quietly built up markets behind the scenes.

In 1960, 15 years after starting the company, Rich brought out Coffee Rich, a freezable, pourable, nondairy substitute. It has dominated its market since, currently with a 90% share, claims Rich. Then the company developed another timely product: frozen dough. Supermarkets wanted a fresh-baked aroma in their stores but didn't want the hassle of setting up expensive bakeries. Today Rich Products runs the largest frozen dough plant in the world. Rich claims that its dough for breads, rolls and pastries is sold to most supermarket chains in the country. Last year this accounted for nearly $100 million in sales.

While the Riches are out acquiring other companies, a lot of bigger acquisitors would like to acquire Rich. "We've been approached by literally every major food company in the world," says Bob Jr. expansively. Every offer is promptly rejected before anyone even gets down to the figures. Rich's niche is so rich that the Rich family intends to keep on working it themselves. ■

Technology

Edited by Stephen Kindel

There are horses for buying and selling, and horses for racing. Guess which kind run for the Triple Crown.

The genetic derby

HOIST A MINT JULEP and sing "My Old Kentucky Home." By all means join in the partying and the wonderful madness that is Derby Day at Churchill Downs. But don't bother betting on the race. Your chances of picking the winner, no matter what the quoted odds are, no matter what the experts say, will be exactly 20-to-1 for every horse. Twenty is the likely number of entries, and every horse has exactly the same chance.

It isn't that this year has produced a mediocre crop of Thoroughbreds, though, Lord knows, it has. And it isn't that the best horses won't be running, though at least three early Derby favorites—Roving Boy, Pillager and Knightly Rapport—are all in the barn for the duration of the Triple Crown campaign, with leg fractures. The real problem of picking a winner is that, as any chalk player or railbird can tell you, form no longer shows.

Or, to put it another way, "It is entirely possible that horses have reached their physiological limits. Since 1791, when *An Introduction to a General Stud Book* was published in England, establishing the pedigrees of modern Thoroughbreds, genetic variability has not increased significantly. Speed in a horse is still a phenotypic extreme." That's Nat M. Kieffer's explanation for the fact that with rare exceptions such as Secretariat—who set the Kentucky Derby's distance record of 1:59.4 in 1973—Derby horses today are running no faster than they did three or four decades ago, despite improved breeding, better training and superior health care.

Nat Kieffer knows what he is talking about. A professor of genetics at Texas A&M, Kieffer is one of the nation's leading experts in equine genetics and as good a judge of prime horseflesh as ever traded ponies along the Brazos. And what Nat Kieffer's explanation means, in simple terms, is that all the money being poured into the big summer yearling sales at Keeneland—over $100 million last year, for an average $337,000 per horse, compared with little more than $10 million, or $32,000 a horse in 1971, when Secretariat was a yearling—is producing more expensive horses, but not necessarily faster horses.

Horses, of course, are not bred to break records. "Records are a human concern," says Kieffer. "Winning is what horse racing is really all about. And it doesn't matter to an owner whether his horse wins in the fastest time or the slowest, just so long as his horse's nose is first across the wire." True, but over time, given the substantial advances in veterinary medicine and equine nutrition, racing speeds ought to have improved. And they have, but not by very much. In 1896, the first year the Kentucky Derby was raced over its present 1¼-mile-distance, Ben Brush's winning time was 2:07.75. In 1974, the year after Secretariat's run for both the record books and the roses, Cannonade crossed the wire at 2:04.

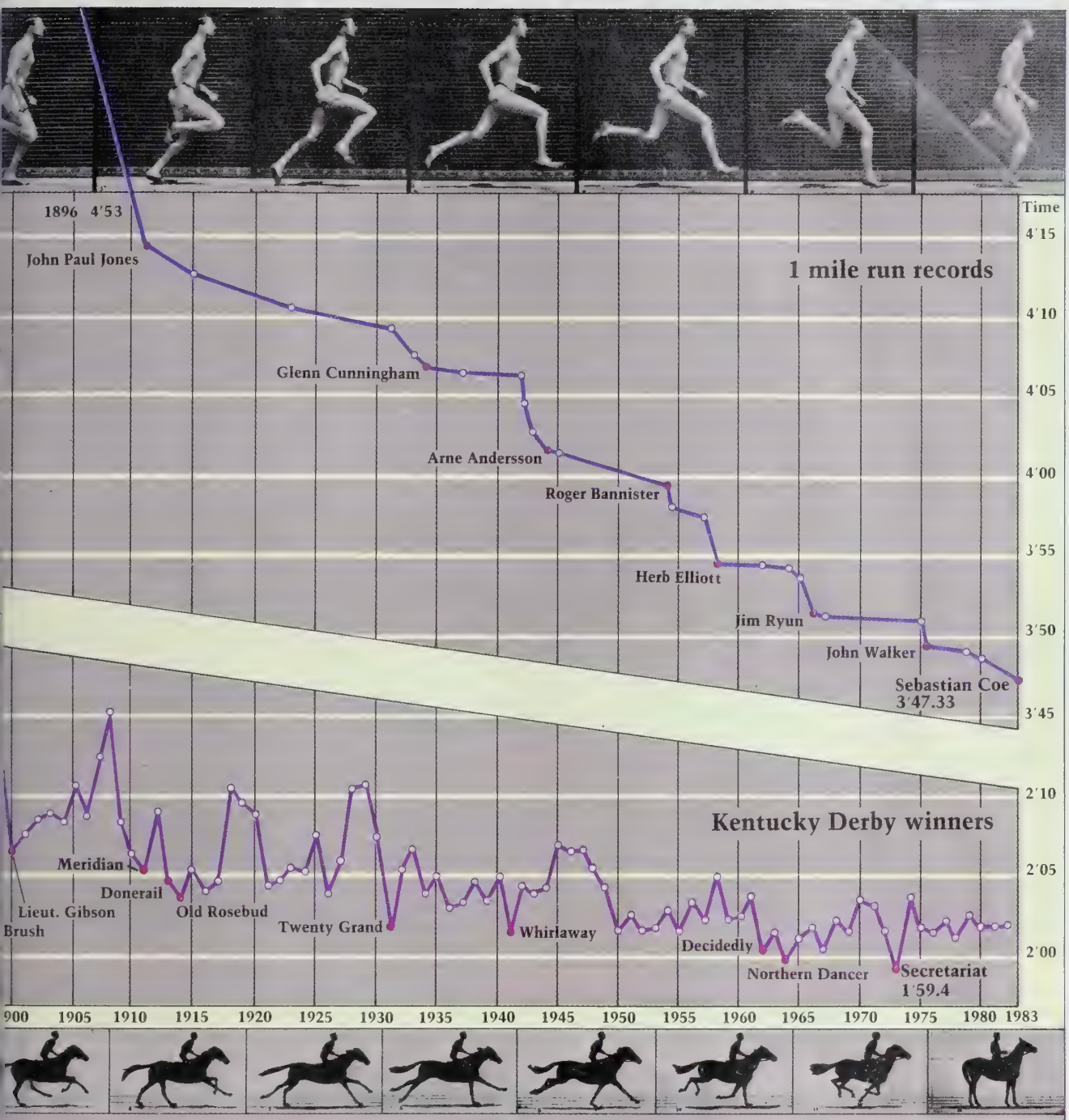
Contrast that performance with the assault on the human record for the mile. In 1896 Edwin Flack of Grea Britain won the first Olympic 1,500 meter race in the uninspiring time o 4:33.2, equivalent to a mile run i 4:53.87. By 1981 Steve Ovett of Grea Britain had brought the time for th mile down to 3:47.33, an improve ment of 1:06.54, or 22.65%. If Ken tucky Derby performances had im proved at the same rate, the winnin horse might well be expected to tur in a blazing 1:38.

Why are humans getting so muc faster while horses are stagnating Horses, after all, are bred for spee That is, they are mated with the ob jective of bringing some group of cha

See how they run

Since 1896, when Edwin Flack of Great Britain took the first Olympic 1,500-meter race in the mile-equivalent time of 4:53.87, human performance over the mile distance has dramatically improved. But horses have not gotten noticeably faster. While record times for the human mile represent optimal performances and are not representative of all humans running, neither are performances in the Kentucky Derby representative of all horses. By the time a horse reaches the Derby, it has proved itself in several major stake competitions. Thus, there is a natural selection in all competition toward superior performance.

Nevertheless, horses are running only slightly faster now than 90 years ago. The reason, it turns out, is that racing capacity—the ability to carry weight over distance in a very fast time—is a hybrid characteristic, and has a tendency to be bred out, as fast horses are mated to each other. Good training and good preparation play at least as important a role as breeding in a horse's winning performance. At least in race horses, nurture, rather than nature, has the upper hand.



Source: Churchill Downs; International Amateur Athletics Federation.

teristics relating to speed—large ng capacity, strong flanks—to the re, while nobody, at least since Hitr, has seriously suggested that huans could be bred the same way. ccording to the logic often used by upremacists and chauvinists of all ripes, equine performance ought to improving while humans stagnate. horoughbred horses do, in a way, nstitute a master race. All registred Thoroughbreds can trace their oodlines back to one of three stalons imported into England between 690 and 1730, and 43 mares to which ey were bred (other stallions and her mares were bred into this group, but all existing Thoroughbreds can trace their lineage backward only through this select group of horses; other lines have died out). Therefore, through a constant and proper selection of desirable traits, better, bigger, stronger and faster horses ought to be the result, if breeding really counted.

But there is substantial evidence that breeding is meaningless. According to Kieffer, who is writing a book on the subject, genetic variability in horses is probably about the same for the 16th century as for the 20th. Inbreeding coefficients are generally on the order of less than 1%, and an inbreeding coefficient as high as even 7% is considered extremely rare. "A horse has 32 pairs of chromosomes," explains Kieffer. "That means that there are a minimum of 4 billion crosses possible with each mating. How can you inbreed with so many crosses?" Breeding for racing capacity (the ability to carry weight over distance at a very fast time), in fact, is most popularly done only by outbreeding, since superior speed in a horse is a hybrid characteristic. What that means simply is that if you take two fast horses and mate them, the chances are very good that the offspring will be of no better than average speed. The best modern example

Technology

of that is the get of Secretariat, who, with few exceptions, have failed to come even remotely close to meeting their sire's performance. Says Kieffer: "I would never pick a horse on a genetic basis. There is always a regression toward the average, which is steepest in parents with the greatest hybrid vigor." That's Kieffer's way of saying that betting on bloodlines is for suckers.

Still, there is the nagging question: Even if breeding doesn't count, surely races can be run faster. Human performances have certainly been augmented by improved equipment, better track design *(see box)* and better training methods, not to mention an increased understanding of physiology. Why haven't horses' performances improved?

Gary Potter (left) *with test horse*
The key to speed is conditioning.

According to Gary Potter, a colleague of Kieffer's and an expert in equine exercise physiology, the answer is that an average racehorse is much like the average American: He eats what isn't good for him and he doesn't get enough exercise. In short the real key to the continued poor performance of horses under racing conditions, claims Potter, is poor conditioning. "It is actually remarkable that horses run as fast as they do," says Potter, "given their diets."

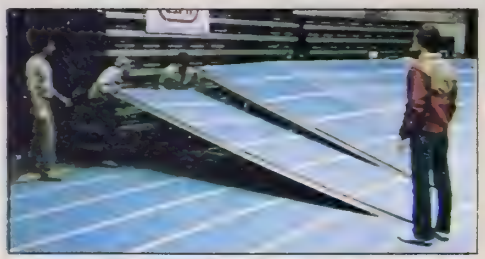
Equally remarkable is the lack of distance conditioning to which horses are subjected. While a world-class miler typically will run upwards of 70 miles a week to build up stamina for a single race, most horses are galloped at distances shorter than those to which they will be exposed under racing conditions. Few of the horses in the Derby will have actually raced the 1¼-mile distance by post time on May 7. The net result of that, says Potter, is that virtually all of the horses will be gasping their way to the finish line. Kieffer agrees: "For the typical Derby, the horse that is in the

A great leap forward

One major difference separating humans and horses when it comes to setting records has been the great improvement in the design and engineering of equipment for track and field, from fiberglass poles for pole-vaulting to sophisticated track shoes. In the days of the bamboo pole, vaulters jumped in the 13-foot range. When aluminum poles replaced them, vaulters were able to fly another 2 feet. Today, with flexible fiberglass poles, vaulters have broken 19 feet.

For runners, the most important advance may be in the track surface itself. In February, Eamonn Coghlin set a world indoor mark of 3:49.78 on the two-year-old, ten-lap-to-the-mile track at the Meadowland's Brendan Byrne Arena in New Jersey. Though Coghlin is undoubtedly a very speedy Irishman, a state-of-the-art track takes part of the credit for his record.

Behind the design of the Meadowlands track is Floyd Highfill, whose company, Tracks West, has designed and built some 23 competitive tracks since the mid-1960s, at sites ranging from New Jersey's Meadowlands and Madison Square Garden in New York to the Silverdome in Pontiac, Mich. "There's no doubt you can run faster on some tracks," he says. "And there's no doubt you sell more tickets for meets when the best athletes are there setting records."



Assembling the track at the Meadowlands
Unleashing the athlete's potential.

Running well on an indoor track is almost an art, from learning how to take the banked turns to plotting strategy over ten laps. Indoor tracks are often as narrow as alleyways, with tight, unevenly banked corners and pitted, soft surfaces.

Three major variables go into improving the speed of such competitive tracks. The first is banking. As arenas have gotten larger, the banking of tracks has gotten higher, helping a runner defeat the pull of centrifugal force. Highfill's tracks have a further advantage: banked curves that fall off quickly, allowing runners in certain lanes to get a "push" down the straightaway. "It's a very subtle difference," says Larry Rawson, an ESPN track and field commentator, "but with the speed of these athletes it can make the difference between setting a record or not."

Highfill, a chemical engineer, works with a modified engineering equation used by road builders to calculate the correct banking on the basis of the size of the track, the radius of the turns and the speed at which the runners will be moving. For competitive tracks, he plugs in an average time of a four-minute mile to get a banking that can be used by everyone from a sprinter to a middle-distance runner.

Two other variables—the actual surface and the support undercarriage of the track—also affect a runner's time. In the mid-1970s two professors, Peter Greene and Thomas McMahon, used a computer to study the properties of various surfaces, from concrete to pillows, while designing a track for Harvard University. Surprisingly, they found plywood to have the best characteristics for speed. A well-designed wood track, they discovered, will return a good portion of the energy a runner expends, while a poorly suspended, rubberized track will throw a runner's rhythm off and return very little.

Highfill's latest tracks, such as the Meadowlands (cost: $200,000), are the result of his own soles-of-the-feet experience and intuition and Greene and McMahon's theoretical studies. In 1978 Madison Square Garden brought the two groups together. The results point up the impressive possibilities of improved equipment. In the first year, 1980, on the Garden's new track, 12 world, 8 U.S., 3 Madison Square Garden and 13 meet records were set.—**Robert Teitelman**

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lead at the head of the stretch, if he has sufficient reserves, will usually take the race."

According to Potter, racing times will not improve dramatically until training methods are improved. "The average trainer," he says, "is not really methodological. If a particular regimen works for one horse, he follows it for all his horses. Those that respond, that win, many trainers will ascribe to good training. Those that lose, or perform poorly, they put off to bad bloodlines." There may be little hope for immediate improvement. Trainers are a highly individualistic lot, who pick up most of their knowledge from being around horses, rather than in the lab or classroom.

Were it not for the exorbitant prices being paid for horses, it probably wouldn't make much difference that their racing performances aren't improving the way humans' are. Then again, says the old Armenian proverb, "The wise horse cares not how fast a man may run."

And nobody has ever bought a Thoroughbred racehorse because it performed like a debenture.

A technician in every boiler

David Unger and Dennis Gormley Jr. would both welcome a little competition in their marketplace. They are feeling a bit lonely in their business of providing environment control and energy conservation services to building owners. While an Arthur D. Little study says that such services have a near-term earnings potential of $1.3 billion, what the energy management business really needs right now is a little respect. "One or two large, serious competitors might legitimize what we're doing and give the industry more acceptance," says Gormley, vice president and general manager of New York City-based Scallop Thermal Management. Adds Unger of Chicago-based Mid-Res, "We are not exactly fighting for market share at this time."

The energy management business, although still new in the U.S., has been alive and well in France for nearly 40 years. Called chauffage, French for heating, the industry was born after World War II, when fuel was scarce and building owners contracted out their heating and ventilating services. For a monthly fee, the contractor warmed the building to a specified temperature. How the contractor got the fuel or ran the heating system was up to him.

Today, as many as 70% of France's apartment and commercial buildings have chauffage contracts. But there was no similar postwar fuel shortage in the U.S. Energy here was cheap—until the 1970s. Then, as energy prices shot up, chauffage began to look marketable in the U.S. But there was a major difference. In the U.S. the business became one of guaranteeing energy conservation rather than one of simply guaranteeing supply.

That didn't work, either. Many buildings were heated by the tenants rather than the owners, who therefore had little interest in conservation. Any owner-occupied building large enough to warrant energy control owners reasoned, was large enough to warrant hiring an in-house staff to do the job.

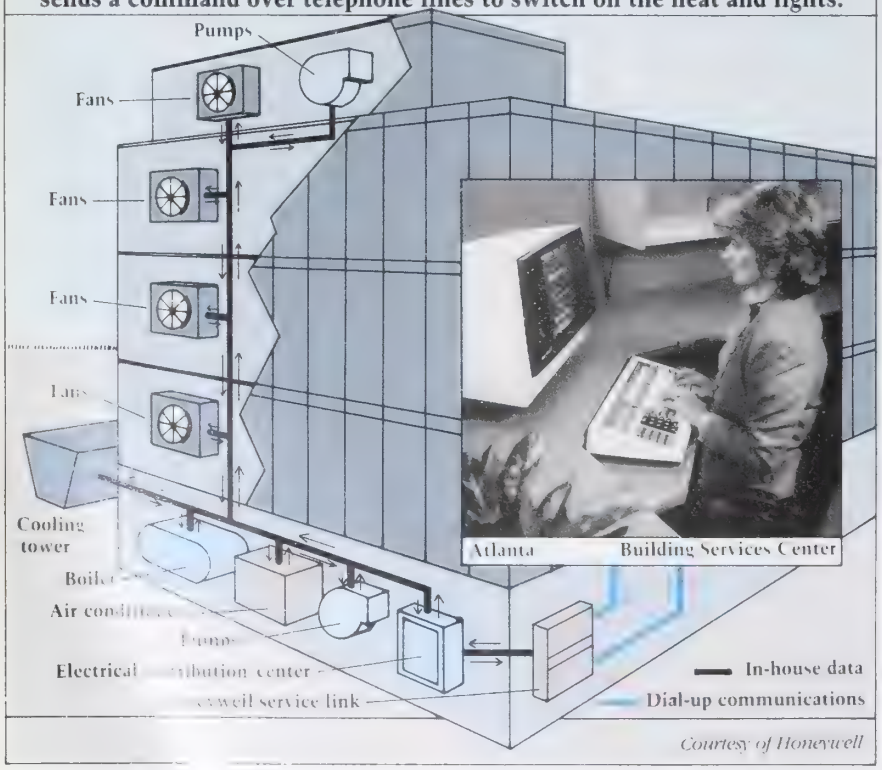
Despite these missteps, chauffage still managed to make some progress in the U.S. Among firms offering services, Scallop, owned by Royal Dutch/Shell, probably comes the closest to true French-style chauffage. After analyzing a building's HVAC (heating, ventilating and air-conditioning) and lighting systems, Scallop will make a bid to operate the building at, say, 95% of current energy consumption. Scallop then makes any needed capital expenditures, pays all utility bills, services the HVAC equipment and puts technicians in the building to monitor the system. The client sends Scallop a monthly payment to cover a 95% consumption level, and Scallop's income is the difference between the 95% and the actual consumption level.

Scallop's largest customer to date is Philadelphia's Hahnemann University and Hospital. Under a ten-year contract that began in 1982, Scallop guarantees to cut Hahnemann's energy consumption from 97% of its base level (some 360 billion Btu) in the first year to 88% in the tenth. That's a guaranteed $4.5 million energy savings for Hahnemann—whose fuel bills now average $6 million a year—if energy prices remain stable.

In 1982 Hahnemann's actual energy consumption was 82% of the base level, giving Scallop a 15% income margin. And Gormley expects 198

Remote control

As employees leave on Friday, the building's microprocessor turns down the heat. But for a Saturday meeting, an operator hundreds of miles away sends a command over telephone lines to switch on the heat and lights.



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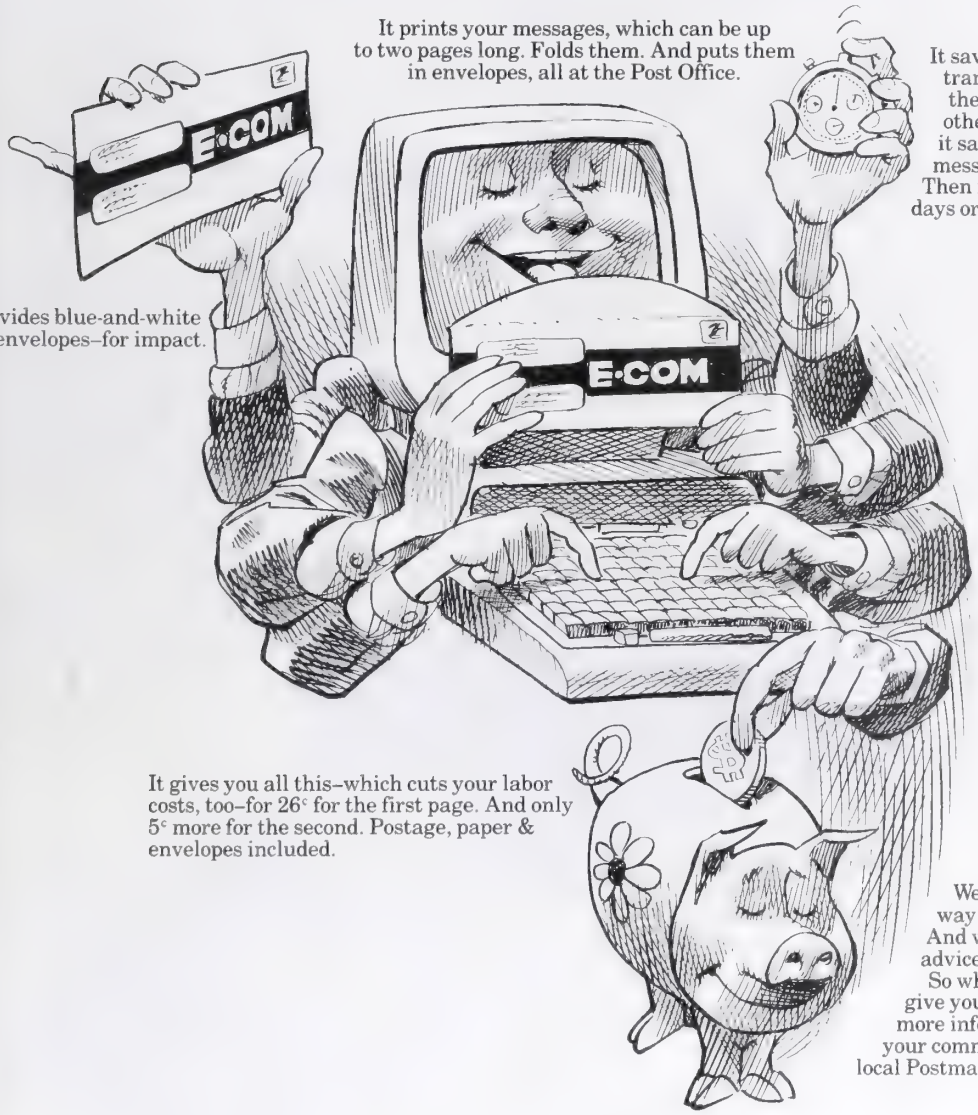

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Technology

savings to reach 25%. Savings beyond 25% are split between Hahnemann and Scallop to give Hahnemann an incentive to conserve. Still, if Scallop keeps consumption at only 75% for the ten years, it will gross more than $10 million against its expected capital costs of only $2.5 million, plus servicing costs.

While Scallop operates on the chauffage concept of the technician in the boiler room, energy management—an American hybrid—has sprung up. Here buildings are monitored from a remote location. The heating and lights are turned on and off by computers. This centralized control system allows small businesses to have access to equipment they otherwise could not afford. Most active in this have been Johnson Controls and Honeywell.

Generally the system works like this: Engineers estimate a building's potential savings and quote a monthly fee. Honeywell sets a fee equal to about one-third of that savings, while Johnson bases its fee on the cost of the work to be done. Then, Honeywell or Johnson installs a microprocessor unit to monitor and control the building's HVAC systems. That unit in turn is linked by regular telephone lines to a central control station. At Honeywell's center in Atlanta or Johnson Controls' in Milwaukee, operators monitor for system failures and alter building programs when necessary. Both companies pay for the installation and servicing of all control equipment, and building owners are responsible for utility bills and the purchase or repair of furnaces, pumps or other HVAC equipment. Honeywell, for instance, guarantees that the customer's savings will exceed the monthly fee. Johnson prefers not to guarantee savings but offers a flexible financing plan.

Remote control energy management was long limited by the high cost of communications. But today long-distance data communications over telephone lines is economical and in-house communications over a building's existing wiring is possible, so remote energy management can be practiced for buildings as small as 25,000 square feet.

There's a third alternative. Mid-Res, partially owned by France's number two chauffage firm, Cofreth S.A., offers a remote monitoring service along with more traditional chauffage financing methods.

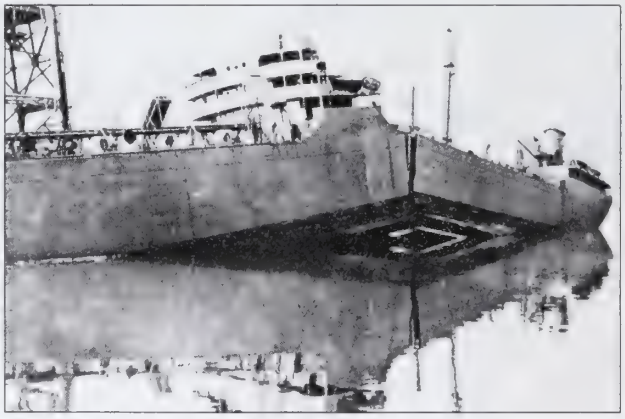
Which form of service is best? Remote monitoring may give you access to more sophisticated control equipment, but American-style chauffage offers financing—which is valuable when money is expensive. The simple energy management customer has an incentive to produce additional savings, but chauffage offers a more specific guarantee. So, right now, it's six of one, a half-dozen of the other, with the customer benefiting either way.—**Laura Rohmann**

The breaking up of America

Fatigue. Delamination. Brittle fracture. Creep. Fretting fatigue. Thermal shock. Ductile rupture. These are the phenomena that are tearing the national fabric of the U.S. apart at a greater rate than any political divisiveness. According to a new study sponsored by the National Bureau of Standards, America is literally breaking apart, groaning under an annual $119 billion worth of economic waste caused by shattering glass, fraying wires and buckling girders.

But it's not all Irwin Allen movies. Forget the nightmare visions of bridges collapsing, walls pitching over and crashing in a cloud of dust, liquid propane tanks rupturing and exploding. The effect of the NBS study is more to be found, say, in the sound of angry strategic planners and accountants breaking their pencils. That's because fully 80% of the problem has nothing to do with the actual breakage of buildings or bodies. Rather, it comes from resources, from capital to labor to materials, theoretically wasted on outmoded building methods. U.S. building and design codes, it turns out, produce structures, aircraft and machines that just might be too safe for our own economic good.

"What we have here is a target figure of what can best be done as far as resource saving if the country were to go to the best technological practice available," explains Jules Duga, the project manager of the study at Battelle, the Columbus, Ohio-based research organization contracted by NBS to do the economic analysis.



Brittle to a fault
Structural failure broke this ship's back.

Duga says $35 billion could immediately be saved if what is now known about improved materials, quality control and design procedures were used throughout the economy. That does not include the cost of acquiring and using the new technologies.

State-of-the-art designs, says Duga, are currently limited to the aerospace and medical implement industries. If what has been learned about materials and design in these high-tech industries were applied to more mundane fields, such as the construction of capital equipment, enormous economic benefits could be reaped. "Over-design means that extra materials are used unnecessarily," says Harry McHenry, an NBS supervisory metallurgist. "But better design allows you to cut down on the thickness of materials and the redundancy of backup equipment without lowering safety standards. What now has a safety factor of 10 to 1 in design terms can often be built with a redundancy of 2 to 1 and still be just as safe."

In an era characterized by slapdash construction and generally poor design, both from an esthetic and utilitarian viewpoint, it is perhaps hard to imagine products being over-designed to the point where they pose an economic threat. But take a piece of machinery built with two-inch-thick metal sides that could be safely designed with just half the metal, and which is kept beyond its useful life because of the huge investment made in it. That's as great an economic danger as the cheap and shoddy. These economic times, the NBS study suggested, would seem to require some sort of balance.—**Jon Schriber**

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Ancient Egyptians operated on cataracts with sharp sticks. Procedures were not a great deal better until recently.

Taking the fear out of cataract surgery

By Laura Saunders

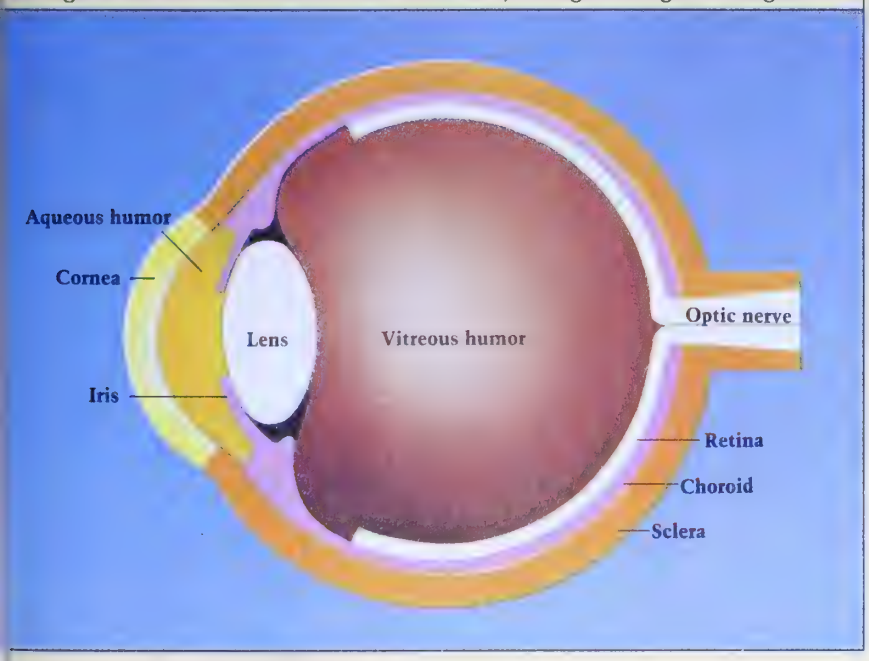
EYE SURGERY still strikes many laymen as the utmost test of surgical skill and a patient's nerve. But the truth is that eye surgery nowadays is extremely common, fairly simple for the patient and often relatively painless. This year ophthalmic surgeons in the U.S. will operate on over 550,000 cataracts alone. That makes the operation more common than surgery for hernia, gall bladder, appendicitis or any other major surgery except hysterectomy and Caesarean section.

The procedure, which is now estimated to be 95% successful, is necessary if the lens of the eye becomes cloudy *(see illustration)*, a condition that often accompanies aging. Left to itself, the lens would become more and more opaque until the victim was totally blind.

As recently as 15 years ago patients recovering from cataract surgery were confined to bed for at least ten days and then ordered to rest quietly for four weeks. (In fact, says Dr. Charles Kelman, a leading specialist, the operation forced some elderly patients into inactivity that was fatal.) What's more, normal vision couldn't be restored. After recovery, patients were fitted with glasses with ungainly "Coke bottle" lenses that allowed them to see well only when looking straight ahead.

The original camera

Light enters the eye through the iris and hits the retina, which transmits images to the brain. With the lens clouded, no light can get through.



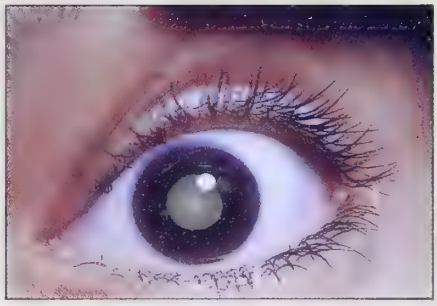
Personal Affairs

Edited by William G. Flanagan

But thanks to a quantum leap in technology made in the 1970s, cataract treatment in all but the most complicated cases is simpler and much more effective, though not inexpensive. Surgery on one eye can cost from $3,000 to $5,000, depending on what is done and where.

The results of the new procedures can be dramatic. William Merrill, 65, a corporate lawyer in Houston, was able to go back to his office on Monday following cataract surgery on Thursday. William Van Buskirk, 57, CEO of a small veterinary supply company in Connecticut, found that treatment not only restored his sight but also corrected the farsightedness that had forced him to wear bifocals for 20 years. Dr. C.H. Huvelle, 65, a Litchfield, Conn. internist, was able to keep practicing medicine. "With cataracts I couldn't diagnose skin diseases, drive or even recognize faces," he says. "I lived in limbo for a year and a half." Besides carrying a full practice, he jogs three days a week and is about to take up tennis again.

No one knows what causes cataracts, though experts are fairly certain



Eye with cataract
Surgery is 95% effective.

An intraocular lens implant
The "arms" are anchored in the eye.

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Personal Affairs

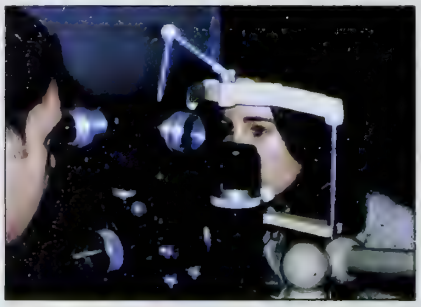
that heredity, ultraviolet light from the sun, radiation, injury, other diseases (like diabetes) and certain medicines (like the steroids used for arthritis) can play a part. The ancient Egyptians performed crude cataract surgery with sharp sticks. The term itself dates from the Middle Ages and means both the eye condition and a steep waterfall—in each it appears that a cloud of white descends, partly obscuring what is behind it. Though people can be born with cataracts or develop them as children, the condition is far more common among the elderly. The National Society to Prevent Blindness estimates that three out of four people over 60 have cata-

Eye tech

The 1970s brought technology from industry and the military to medicine, and completely changed the treatment of eye disease.

The new equipment means treatments that are usually far simpler, less painful and more effective for the patient than the procedures they replaced. The eye never could stand the rough surgical procedures that other parts of the body could. "Ophthalmology pioneered the idea of least-invasive surgery, which is the big thing in all surgery right now," says John Gilbert, head of an ophthalmic division of Johnson & Johnson.

The innovation that has seized the public imagination more than any other is the laser. It produces an intensely focused beam of light that is used mostly to make a burn or hole at a precise point in the eye. The laser's forerunner was developed by a German eye doctor after WWII. He put his patients on the roof of his office, then focused sunlight through lenses in much the way that children burn leaves with a magnifying glass.



Experimental lasers* (left) *lose Star Wars look when adapted for use in clinics. Argon laser* (above) *is used on a diabetic.

Today three types of lasers are in general use: argon, krypton and Neodymium YAG (for yttrium-aluminum-garnet). The YAG laser is used almost exclusively following cataract surgery *(see story)*, and the others primarily for retinal repair. If blood vessels in the eye rupture, the bloody mass can obscure the retina and even detach it by pulling on it. The laser cauterizes them exactly at the point of a hemorrhage and prevents further damage.

Krypton lasers, on the other hand, are best for delicate work near the most sensitive part of the retina. The argon laser is used for more general repair. Such treatment has saved the sight of thousands of elderly people and diabetics. "Before 1970," says Dr. William Vallotton, head of ophthalmology at the Medical University of South Carolina, "nearly everyone with diabetes was destined to total blindness. Now we can save the sight of 65% of them with the laser."

The argon laser is also effective in treating glaucoma that won't respond to drugs. In glaucoma, fluid builds inside the eye. A doctor can now take the laser and make a series of pinpoint holes in the front of the eye to relieve pressure. Classical surgery for glaucoma was always risky, long and complicated; laser treatment can often be performed in 15 minutes as an outpatient procedure.

The operating microscope, which became popular about 1965, has also improved the success rate of eye surgery. Needles are now sharper, and sutures finer, and much greater precision is possible. Moreover, a device called a vitrector now enables surgeons to remove the vitreous *(see illustration on p. 159)* through incisions only 1/20th of an inch long. Vitrectomy is necessary if blood collects in the vitreous, blocking the path of light to the retina. "Ten years ago," says Dr. Robert Sinsky, "we could do nothing about this. We had to leave it there."

Ultrasound technology has also brought some radical changes to eye treatment. A high-frequency ultrasound "needle," called a phaecoemulsifier, is used in cataract surgery. A different type of ultrasound, akin to sonar, is widely used in diagnosis. Doctors can measure patients for lens implants before cataract surgery and, if the cataract completely clouds the lens, check the condition of the retina. Ultrasound can also locate foreign bodies and tumors and help diagnose general retinal disease.

For specific knowledge about blood vessels in the eye, a new technique with a photosensitive dye, called fluorescein angiography, can provide valuable information. The dye is injected into a vein in the arm, whence it flows to the eye, where its progress can be followed.

The sum of these advances is that, as Johns Hopkins Professor Walter Stark says, "We can manage conditions that we couldn't manage in the past. A lot of eyes are seeing because of this new technology."

They have also helped make ophthalmology one of the most desirable surgical specialties. "We're one of the few where you can make elderly people see almost as well as they did when they were 15 or 16, instead of a month ago," he says.

But the new technology doesn't come cheap. Most of the new machines cost more than $30,000 and a new YAG laser runs about $100,000. "When I first saw the YAG," cracks Dr. Charles Kelman, "I was sure YAG stood for 'Your Assets are Gone.' "—L.S.

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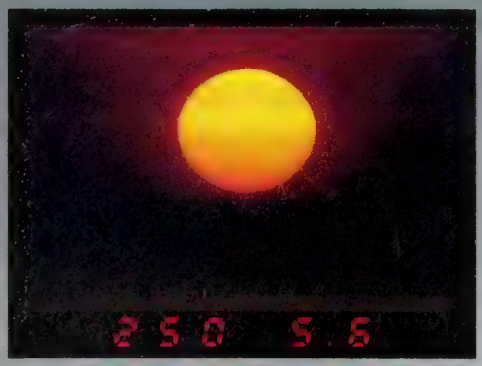

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Personal Affairs

racts in some form.

Innovations over the last decade have affected all phases of cataract treatment. To begin with, many surgeons now perform the operation right in their offices. Even those who operate in hospitals rarely require their patients to stay more than 48 hours. In most cases a local anesthetic can be used, which avoids the dangers of general anesthesia and leaves the patient able to answer questions if problems arise. An uncomplicated cataract operation may take only 15 or 20 minutes. For most patients there is no pain, either before or after the operation. "The worst part of the whole thing was taking the anesthetic," says Dr. Huvelle. Moreover, there's no confinement to bed. After surgery you can get up and walk around. There are, however, restrictions on heavy exercise for approximately four weeks.

Cataract surgery itself is really a two-part procedure. First the cloudy part of the lens must be removed, and then the lens' absence must be compensated for. Surgeons can pick any of several methods to accomplish this, but, contrary to popular belief, one they never use is lasers. "This misconception is driving us all crazy," says Dr. Robert Sinsky, a prominent specialist. "If patients are really stubborn about insisting on lasers, sometimes I just give up and let them believe I'm using one."

The lens of the eye is something like a flattened grape, with a skin outside and pulp inside. Formerly, all surgeons made an incision halfway around the iris (about 20mm) and popped the whole lens out, either with forceps or, later, a cryoprobe (a freezing instrument that sticks to the lens). Some still use this method, called intracapsular extraction.

Recently, however, they have devised a way to remove only the pulp of the cataract, leaving the skin of the lens intact. This method, called extracapsular extraction, allows a much smaller incision (3mm), which is usually far safer for the eye. After the incision is made, the cloudy pulp is pushed out of the capsule or, if it has hardened (as often happens with older people), broken up with an ultrasound "needle" in a process called phaecoemulsification. Then it can be sucked out of the small opening.

Studies are incomplete, but many experts believe that extracapsular extraction, because it leaves more of the lens intact, causes far fewer complications. In some cases, however, the back of the lens capsule may cloud in a year or two. Should this happen, the surgeon can fix it simply by using a YAG laser to make a hole in the back of the capsule.

Once the cloudy lens is out, any of three methods can be used to restore vision. For the patient, the least desirable calls for the traditional cataract glasses, which often severely restrict the wearer's activities. Another method employs contact lenses, often the type that can be worn for months at a time. These give the wearer far better vision but they do require maintenance. Either glasses or contact lenses may be necessary in complicated cases, especially if the patient has another eye disease.

Most convenient of all is the intraocular lens implant, a small plastic lens with "arms." It is inserted into the eye after the cataract has been removed and then anchored by the surgeon. The entire device, arms and all, is no bigger than the iris of the eye, but it is permanent, maintenance-free and doesn't restrict the wearer's activities. It may even correct other vision problems, as in Van Buskirk's case. Though in wide use for only about five years, lens implants have won overwhelming public acceptance and are now used in perhaps 70% of all cataract operations. Surgeons are pleased with their performance and, according to Dr. Sinsky, may eventually recommend them for 99% of cataract patients.

If you or a relative has cataracts, first look for a surgeon in whom you have absolute confidence. One good way to do this, many doctors say, is to seek out patients who have had the surgery. "Eye patients are unusual," notes Dr. Sinsky, "in that those who don't do well are around for a long time to talk about it."

Expect, if you have cataracts in both eyes, to have them operated on separately, usually several months apart. Most ophthalmologists believe that what happens with one eye is a good indicator of what will happen with the other.

Don't be surprised if your regular eye doctor refers you to a specialist for surgery. Though simpler for patients, the new procedures are complicated and delicate, and surgeons who operate constantly are likely to get the best results. "Probably 40% of the surgeons are doing 80% of the cataract surgery today," says one specialist. "It's hard to perform consistently good surgery if you do 50 or less operations a year."

Some older surgeons have never learned the new procedures. Dr. George Weinstein, professor and chairman of ophthalmology at West Virginia University, even recommends asking a surgeon's complication rate, though this may be impossible to verify. If in doubt, don't hesitate to seek a second opinion. (Of course, if you are really suspicious about a doctor, check with the county or state medical society to see if any complaints have been lodged.)

Whatever course you choose, be conservative. Though cataract surgery today is successful most of the time, other diseases—like hypertension, glaucoma, arthritis or diabetes—may make a delicate procedure even more difficult. And experts warn that in a small percentage of cases, complications are impossible to predict.

Gather ye flight points while you may

The baksheesh offered by the nation's major air carriers shows no sign of abating—not yet. But the practice has both corporations and the IRS smoldering. Travel managers watch T&E expenses mount unnecessarily as employees scramble to garner mileage points. The IRS, meanwhile, lusts after taxation of those free trips.

For now, though, it's still Christmas in April for frequent travelers—with the freebies occasionally winding up as cash. One businessman, for example, recently earned enough points for a free first-class trip for two from New York to Hawaii on American Airlines. His wife, who departed earlier than he did, was told at the gate in New York that first class on the Los Angeles leg was filled because of an equipment change. She had to fly coach—with a consolation check on the spot from American for $43, the difference between a first-class ticket and coach.

"We're all dying for this thing to end," says Bob Prairie, who runs the travel department at National Distillers & Chemical Corp. and who finds that passengers flying on their employers' time and money are all too often choosing flights on the basis of game strategy rather than ticket price. A National Distillers executive, for example, recently flew one particular carrier from the East Coast to the

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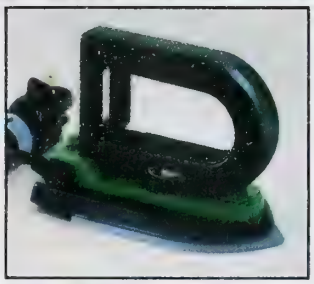

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Personal Affairs

West Coast after choosing between two flights 15 minutes apart.

"I said, 'For 15 minutes you're paying close to $100 difference each way,'" Prairie recalls. "That sort of threw him, but then he said the plane must be a 747. I said, 'They're both 747s.' Well, I didn't win out, let me tell you. He was thinking of 6,000 mileage points or some damn thing."

Travel managers are finding it virtually impossible to enforce rules requiring that employees turn in all bonus coupons or mileage accumulation earned on company time. (In a recent survey by the newsletter *Runzheimer Reports on Travel Management*, one-third of 29 companies polled said they considered such bonuses company property.) The main reason enforcement is difficult is that most airlines refuse to cooperate with companies that try to find out which employees are playing which games.

One travel manager, Allied Corp.'s Arlene Macchia, asserts that the frequent-flier games have even caused a "morale problem" among Allied employees. "The average person feels he's entitled to any bonus earned," she explains, no matter whose money paid for the tickets. Allied's policy requires bonuses to be turned in, but, says Macchia, in order not to make matters worse, "we are not enforcing it to any great extent."

The IRS, for its part, would like you to believe that it will keep track of your use of airline freebies. But the difficulty of running all this down probably renders the threat meaningless, at least for tax year 1983. For the record, a bonus could be considered taxable income if used for pleasure travel. If used to reduce the cost of a business trip, a bonus must be subtracted from the cost of the trip in a deduction claimed by either an individual or a company. No rulings have been made yet on the lagniappe to frequent fliers, however.

As frequent fliers continue to accumulate points, airlines are facing another problem—how to make room on the flights that bonus users favor. Hawaii, San Francisco and the Caribbean are especially popular destinations. One observer speculates that carriers might restrict the times when bonuses are usable. Holiday periods, for instance, might be made off-limits. Says First Boston analyst Michael Derchin, "It really isn't good for the airlines to be giving up a lot of free seats during the holiday periods when they can fill up those seats with full-fare passengers."

The carriers insist, nevertheless, that they are happy with their bonus programs. But those programs will make less sense as the economy improves and as more frequent fliers vie for fewer empty seats. Car rental companies have tacitly agreed to cease their giveaways. Budget abandoned its gift program in February. Hertz, Avis and National will stop June 30. For their part, air carriers will be under increasing pressure to follow suit.—**Kevin McManus**

The cruelest month

April is the month when colleges notify high school seniors around the country that they've been accepted—or, more likely, rejected, since most students don't get into the schools of their first choice. Sad as that is, however, many students don't even try. They fear they can't afford it.

In many cases, they and their parents simply don't understand today's world, where over 70% of the freshman student body of Harvard receives some financial aid. The fact is, as far as parents and students are concerned, virtually all private schools cost the same. They may differ in nominal cost (Ivy League schools now charge over $12,000 per year for room, board, tuition, books and miscellaneous fees), but parents' and students' current contributions are relatively the same at many schools, where tuition costs can vary considerably. The balance, if any, is made up in financial aid—scholarships and loan programs.

Just how much will it cost you to send your offspring to college? The answer is complex but, if properly understood, can save parents with kids still years from the campus a lot of grief and perhaps a lot of money. For simply setting aside money—even in a Clifford trust that shields interest from taxes—is not often the wisest thing to do.

Robert Leider, publisher of Octameron Press, which produces inexpensive yet fact-riddled guides on college financing, has come up with a formula for parents to figure how much of the burden they will shoulder when Johnny goes marching off to campus.

There are a few assumptions. First, that a family's earnings and asset growth will proceed at the same rate as the growth in tuition costs (that is, a bit higher than the inflation rate). Second, that the longtime intent of Congress—i.e., that youngsters are primarily responsible for paying for their education, with parents the next source—will prevail. That's why aid formulas assess family income differently from student income (FORBES, *Apr. 11*).

That said, there are seven steps to follow to determine if you or your offspring will qualify for aid or guaranteed loans, says Leider.

1) Determine what type of school your youngster is likely to attend. If he or she is very bright or very talented, the Ivies or similar schools might seem appropriate. If your issue is simply normal, as difficult as that may be to admit, you might consider a state college or a less prestigious private university.

2) Find out the cost of attending the kind of school your youngster is likely to qualify for. Remember that the cost of attendance should include tuition

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Personal Affairs

room, board, miscellaneous transportation and books. That figure today might well be $13,000 at an Ivy League school, $6,000 or less at a state university.

3) Take your current adjusted gross income. Add to it 5% of the value of all your assets (home equity, stocks, bonds, money market account—but not insurance, paintings, stamp collections, etc.).

4) Divide 3 by 2. That is, if your family has an adjusted gross income of $40,000, and 5% of assets is $5,000, and the cost of college is $10,000, the resultant quotient is 4.5.

5) If the family has more than three dependents for income tax purposes, subtract 0.5 for each dependent from that quotient.

6) If you will have two kids in college at the same time, divide the quotient by 1.5.

7) If, after all these calculations, you arrive at a figure of 6 or less, you will probably qualify for financial aid. If it is 6 or greater, better start salting away as much cash as you can afford right now. You probably will not get much help.

Here are some other points to keep in mind, most of which many parents only become aware of once their issue is en route to the campus:

• Student aid does not carry any tax liability. A family in the 44% income tax bracket, for example, must earn $1,786 to generate $1,000 that will go for college expenses. But if you can get that money from the state or the college or Uncle Sam, the $1,000 is really worth $1,786 to you.

• If grandparents want to help foot the bill, a direct gift from them to your offspring is probably not the best way to go. The student's assets are "taxed" at a rate of 35%, according to the aid formulas. It would be better if they made the gift to the parents (whose assets are "taxed" at 5%), or held on to the money until the youngster is out of college.

• The process of "need analysis" offers endless possibilities and should be thoroughly understood. For example, if you have consumer debt (which does not show up in the need analysis formula), consider borrowing against your house or stock holdings (which do) and pay off the consumer debt.

The result: You will reduce the value of your assets, thereby qualifying for more assistance.

• If you have rental property, report it as a business, not a personal, asset (which it properly is, of course). The need analysis computer treats business assets more favorably than personal assets.—**W.G.F.**

Loose ends

At tax filing time we often make resolutions about what tax moves to make during the current year so we won't owe as much money next time around. One way of slashing your tax bill is, of course, by making charitable contributions. Here are some thoughts to bear in mind if you want to cut your taxes charitably, courtesy of Deloitte, Haskins & Sells.

• No matter how worthy, an individual does not qualify as a bona fide recipient, nor do some tax-exempt organizations (chambers of commerce, social clubs, etc.). Most schools (including private schools), churches, community chests and scientific foundations do qualify.

• The measure of your deduction for donated property generally is its fair market value, not what you paid for it. But before you sign over that appreciated stock or real estate, remember two things. One, when donating property, the amount of the deduction will be reduced by any ordinary income tax or short-term capital gain that you would have had to pay if the property had been sold by you.

Second, the deduction for tangible personal property donated to a charity for use "unrelated" to the charity's function must be reduced by 40% of any long-term capital gain that would have resulted if it had been sold by you. The use of the property is deemed unrelated, for example, if it is anticipated the charity will promptly sell it. So the donation of a painting to a charity for its annual fundraising would have to be reduced. But a painting donated to an art museum for hanging would not.

• A personal residence (including a vacation home) or farm can be a highly useful vehicle for charitable contribution that is free of the restrictions attached to other forms of deferred giving. It is even possible to give such a residence to a public charity now and yet retain possession of the facility for your lifetime and that of your spouse.

• The value of services rendered to a charity, such as a lawyer's or doctor's providing legal or medical assistance is not deductible. Nor, if you allow a charity to use your property, can you deduct the rental value.

Remember that there may be a limit on how much you can deduct in any given year for contributions. Most contributions to public charities (e.g., churches, schools, etc.) are fully deductible up to 50% of your adjusted gross income. However, contributions of appreciated long-term capital gain property are limited to 30%. But contributions not currently deductible, because of those limitations, can be carried forward for five years.

Visitors to New York during the months of April, May and June can be forgiven if they think they are in London. For the theaters, museums, music halls, churches, opera houses, department stores and even the rivers surrounding the city will take on distinctively British aspects. Everything from concerts by the London Symphony Orchestra to Oxford-Cambridge sculling races on the East River to displays of royal collections of art and antiques will transform the Big Apple into a little bit of Blighty. Britain Salutes New York 1983 begins April 14 and runs into the summer. It marks the 200th anniversary of the signing of the Treaty of Paris and "peace" with Britain (apparently, the War of 1812 doesn't count).

The Spirit of America

Indian Island, Maine, by Dick Durrance II

Off the craggy coast of Maine, adventurous men still seek the bounty of the sea. And at journey's end, they welcome the sight that means they're safely home again. Home to their families and a glass of America's native whiskey: Kentucky Bourbon. Old Grand-Dad still makes that Bourbon much as we did 100 years ago. It's the spirit of America.

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Old Grand-Dad

Kentucky Straight Bourbon Whiskey 86 Proof Old Grand Dad Distillery Co Frankfort, KY ©1983 National Distillers, Inc

Faces
Behind The Figures

Edited by Eamonn Fingleton

People power

"I couldn't be happier," says Donald Burr, president and CEO of fledgling airline People Express. From a standing start less than two years ago, revenues have zoomed in the first quarter of this year to the equivalent of an annual $200 million. That compares with a total of $139 million in 1982. Now Burr plans to treble People's current level of business in the next 18 months.

Burr's splashiest move has been to get federal approval for a new low $149 single fare between Newark and London. Using a leased Braniff 747 Jumbo, he reckons he will break even filling a realistic 62% of seats. And if the British authorities insist on a higher fare (to protect British Airways), break-even will be even lower.

Starting in June, he plans to phase in up to 38 Boeing 727s—20 of them ex-Braniff and 18 pass-ons from Alitalia—to beef up his domestic schedules. Price: around $4.2 million each—less than one-third of new and a figure that will look like a steal as the travel industry recovers. All this will neatly solve one of the new airline's most pressing problems: fitting in all the people who want to take advantage of its cheap fares. June should also see an easing of People Express' other problem, a shortage of reservation telephone lines. Even Burr does not have a number on which one can call him directly. "We grew so fast," he says, "that we outgrew Bell's ability to provide new lines."

Burr, who claims his hobby is work (actually he also skis and he ran a nifty marathon in New Orleans in February), came to People via Harvard Business School and a spell in investment management. He is already highly respected by rivals. "The trend is that, where airlines have a choice, instead of putting planes against us, they are switching to where we are not strong," he reports.

Donald Burr of People Express
Part-time baggage loader.

Despite low fares, Burr, 41, continues to earn one of the best margins in the industry—averaging 7½% of revenues last year and doing even better currently. His labor costs are low and he prides himself that the organization is filled with young people "having a blast." Every employee must buy 100 shares (cost, $650 at recent stock prices, which can be financed through a payroll deduction plan), and many have built holdings worth $40,000 or more.

Which perhaps explains why People has no unions, even for pilots. And why everybody from Burr down helps to load baggage when the occasion demands.—**Howard Banks**

Another revolution

The audio graveyard is littered with the wires, woofers and wows of "revolutionary" products their promoters said were destined to change the industry—and never did. Remember four-channel sound (Quad), eight-track tapes and the Bonephone? Joseph A. Lagore remembers, but adds "This *really* is the first revolutionary audio product since stereo." Lagore, 51, president of Sony's U.S. consumer products division, is talking about digital audio.

The idea has been familiar to audio cognoscenti for a decade. The digital system converts sound waves to binary pulses similar to the bits of information a computer uses and imprints them on a new kind of record less than 5 inches wide. The records, containing up to 70 minutes of sound, are read by a low-powered laser. The bi plus: no needle to wear out, n grooves to get scratched or clogge with dust.

What is new is that Sony and Dutc electronics giant Philips have jus launched compatible systems in th U.S. This should open up sales to much wider public, says Lagore. H predicts that 80% of the U.S. turnta ble market, currently around $20 million a year at retail, will be digita by 1993.

The new players sell for $800 t $900. For most normal people—tha is, incurable audiophiles aside—that bound to seem steep compared wit about $300 for a good convention turntable. A digital disk goes for $1 to $22 now, about twice the price of conventional LP. Thus, Lagore e pects sales of only 50,000 Sony uni this year, most of them to audio buff But he thinks prices of both the pla

Sony's Joseph Lagore
Look, no needles.

s and disks will drop as much as % within a decade.

By then, Lagore feels the market ll have grown not just on fanatics t on just plain folks who want aller disks to carry around for car cks, Walkmans—and those suit-se-size audio boxes that liven up y parks in summer. You still may t like what you hear, but you will t to hear it better.—**Paul B. Brown**

Computer display

fore G. Daniel Prigmore took a nd in its destiny, Boston's Com-onwealth Pier faced a distinctly un-rtain future. Its magnificent ware-using facilities at the foot of North-n Avenue, built 70 years ago in aux arts style, were almost derelict, rved for business by changed ship-ng patterns. Now Prigmore, who ads the real estate subsidiary of the lelity fund management group, kons the pier's best years are still come. Fidelity is investing $100 llion to turn Commonwealth Pier o the world's first permanent com-ter exhibition center, due to open xt year.

Prigmore thinks his timing could t have been better. "Even five years o this would not have been possi-," he says, striding confidently rough the property. "There would ve been no need for it."

So far Prigmore, 40, has lined up ants for only one-third of the ice. But, as he points out, the center ntains 1.4 million square feet—al to 30 floors of, say, Boston's n Hancock Tower—and it will ak even well below full occupancy. expects booming business thanks explosive growth in the range of ducts and brand names in the in-stry over the last few years. "Ten rs ago, when there weren't very ny computer manufacturers who ttered, it was easy for a computer er to check out the market," he s. "But now buyers are finding it re and more difficult to cover the terfront. Here they will have the ducts of hundreds of manufactur-all in one place."

rigmore, who had a brief spell as a estate developer in his own right re he joined Fidelity seven years , still shows evidence of an inde-dent-minded past by sporting boy boots at the office. He is an ert on refurbishing old structures, ing spent the late Seventies ing and renovating run-down ldings in downtown Boston. In the cess, he built a $40 million real te portfolio for Fidelity.

Fidelity's G. Daniel Prigmore
How do you sell people something they haven't heard of before?

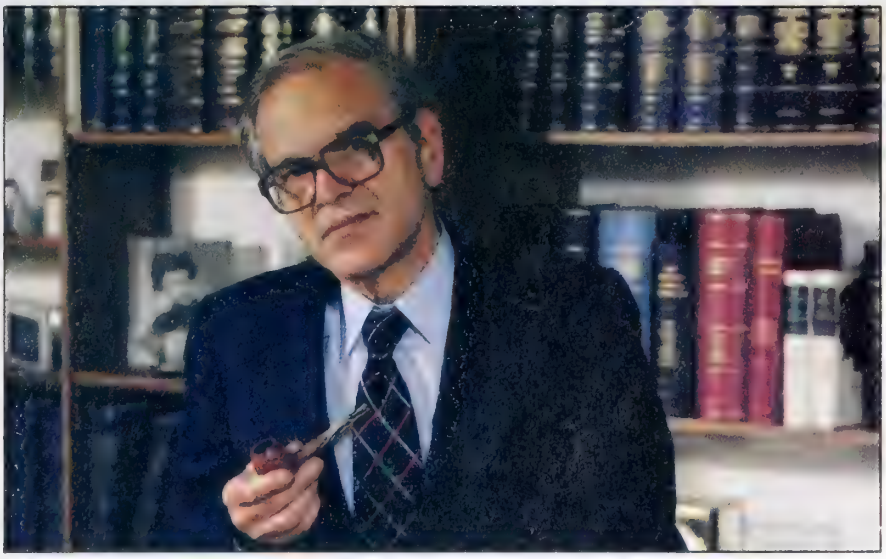
Prigmore's biggest problem with BOSCOM, as he has dubbed the new center, was selling it to the computer industry. "How do you convince a whole industry that they should all commit themselves to something they haven't heard of before?" he asks.

The breakthrough came in October 1982 when IBM booked 20,000 square feet. While cautious rivals were signing only half-hearted letters of intent at first, Big Blue went straight to a fully binding lease. If he needed any further endorsement he got it, albeit in a backhanded way, from Texas property tycoon Trammell Crow, who is planning a similar project in Dallas.—**Janet Bamford**

Repelling sharks

The scene is becoming all too familiar. A corporate raider buys 10% or 15% of a sleepy company. The victim's management, fearing imminent mayhem, buys out the unwelcome intruder at a hefty premium to market, leaving other stockholders fuming.

So many takeover "sharks" are now making a business of extracting "go-away" money from panicky victims that the SEC recently asked an advisory committee to examine the question. Not a moment too soon, says top New York takeover lawyer Joseph Flom. "The number of instances has been increasing asymptotically—going straight up," he says between



Takeover lawyer Joseph Flom
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puffs on his pipe. "Every month there are more players in the game."

Flom, 59, whose Skadden, Arps firm has pushed its way to the top of the takeover business advising on such deals as Shell Oil's $3.7 billion purchase of Belridge Oil in 1979, reckons there are no easy solutions. Sometimes the go-away game is tantamount to blackmail and sometimes it is simply the normal working of the market system. It all depends, says Flom—and not only on which side he is representing.

"There are many good reasons why a company should pay a premium to buy out a controlling block of shares," he says. "The problem is simply put—that an inefficient management is using corporate assets to buy itself a quiet life—but it is not a simple problem. Control of a company is itself an asset that is worth something over and above the value of the shares involved. It is right that a company management should be allowed in certain circumstances to buy back that asset for the benefit of other stockholders."

Flom, who litters his six-window corner office with choice items from his personal art collection, reckons a partial solution might be to block companies from buying back stock within a certain quarantine period, thus leaving the shark to stew for a decent interval. And the U.S. might usefully adapt a British rule requiring that once an outsider's percentage in a company increases above a certain limit, he should have to extend a general offer to all stockholders. But he adds: "We have the best market system in the world. We must be careful how we change it."—**E.F.**

The mouse that roared

"About 20% of the people who cancel their pay-TV service do so because they don't want their children exposed to adult films," says Jim Jimirro, president of Walt Disney Productions' new cable television subsidiary. Premiering this month, the Disney Channel is billing itself as the only choice for all the family—an implied put-down of the adult fare programmed by HBO and The Playboy Channel.

Disney's Jimirro and friends
Family favorites.

For about $9 a month, the Disney Channel will offer G-rated programming 16 hours a day, 7 days a week, nationally. About 80% will be Disney product, the rest acquisitions like *Black Beauty* and *Prince Valiant*. The parent company has committed $100 million over the next three years for original programming, nearly half of which will be spent in the first year on new comedy and dramatic series and specials. And, of course, there is the rich Disney library, including 160 feature films, 450 cartoon shows, the original *Mickey Mouse Club* television show and 30 years of *The Wonderful World of Disney*.

Disney originally planned the channel as a joint venture with Westinghouse's Group W cable subsidiary but decided to go it alone after the two sides failed to agree on choice of programs. Jimirro is still hoping Group W will carry the channel over its 200 systems. Disney already has contracts with seven multisystem cable operators, giving it access to up to 4 million potential customers on startup day, Apr. 18. Disney isn't counting on any profits until early 1986. "In this business if you can keep increasing the number of subscribers you have once you break into the black, your profits really take off," says Jimirro, 46, who is a veteran of Disney's telecommunications operations. Disney expects to have 500,000 subscribers by the end of the first year, with a total of 2 million needed for break-even. "There is no doubt," he says, "that many of the subscribers will be first-time cable users."—**Ellen Paris**

Life on a carousel

How do you get rid of the somewhat battered contents of an abandoned amusement park? How much is tons of unsorted foreign coins worth? Where do you find buyers for superannuated police cars?

The range of problems that land on Carla S. Lallatin's cherrywood desk seems almost limitless. At 37, she is the $51,000-a-year head of New York City's Division of Municipal Supplies. She is the chief purchaser of equipment and materials for the giant city bureaucracy, which last year needed $450 million to keep up supplies of everything from fuel oil to fire engines. And when the city wants to unload supplies no longer needed, Lallatin gets the problem. It is in selling the city's castoffs that Lallatin, a precise westerner, has discovered the full, rich pattern of the Big Apple's eccentricities—and where she has

COMPATIBILITY: the second of the OPEN World Five C's - the criteria for evaluating any information management system.

To a world of diverse technology, Northern Telecom brings compatibility.

The world of information technology can be one of frustrating diversity. Equipment from different suppliers that won't work together, communications systems that use different standards, new technology that won't function with existing systems. Some manufacturers even promote their own proprietary standards to lock users into their systems. In short, there's a lack of compatibility.

A truly effective information system must be able to undertake a variety of functions, and to accommodate many types and brands of equipment. Compatibility is essential.

Compatibility. The second of the Five C's of the OPEN World. Compatibility is part of Northern Telecom's technological heritage as a century-old supplier to the telephone industry. There, every piece of equipment *has* to work with everything else. And that's the sort of compatibility we're designing into our approach to information management: the OPEN World.

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In the OPEN World, many erent makes and types of uipment can ork together compatibly.

this kind of compatibility in a number of ways. We've signed agreements with a number of major suppliers of data processing equipment such as Sperry Univac and Digital Equipment Corporation, to make sure our products and theirs will work together effectively. We're also making our key interface specifications available to any other equipment manufacturer.

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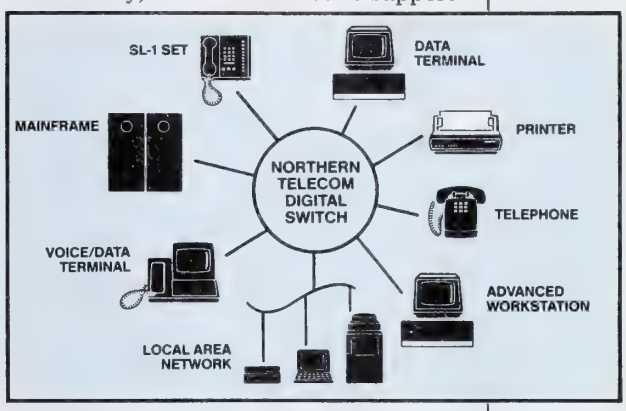

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and promote use of internationally accepted standards (such as the X.25 data communications standard, and the International Switched Digital Network).

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Control— You, not a supplier, should be able to control the designing, building and operation of your system.

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With Compatibility, these are the Five C's, the foundation of our commitment to the OPEN World—a rational, cost-effective approach to information management.

For more information, write OPEN World, Northern Telecom Inc., 259 Cumberland Bend, Nashville, TN 37228.

The OPEN World

The OPEN World is Northern Telecom's program for the planning and building of information management systems. It is based on the concept that all information can be handled in one integrated system. One system, based on communications, that will allow many makes and types of equipment to work together and that will evolve to protect against obsolescence.

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OPEN stands for Open Protocol Enhanced Networks, but the acronym OPEN conveys its true spirit.

This is the second in a series of advertisements that describe the OPEN World and the Five C's—the five key criteria on which it is based.

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Behind the Figures

made her biggest strides since taking office in 1981. She reckons these sales this year should raise a useful $2.5 million, compared with just $1 million in 1979.

The amusement park assignment was a good example. The nine-acre park, situated near La Guardia Airport, had been abandoned for six

New York City's Carla Lallatin
Foreign coins by the ton.

years, and squatters were raising chickens and goats in the ruins. She and city Assistant Commissioner Fred Nightingale advertised for sealed bids and got $100,000 for the rides, pinball machines and assorted jumble. Another city agency has found a developer to buy the land as the site for a wholesale flower market.

As for the foreign coins, she has arranged another sealed bid sale later this year for dealers and expects the hoard to fetch at least $10,000. It represents 1½ years of harvesting the city's parking meters, which in addition to gobbling quarters can be placated with coins from such far-off places as Chile and Vietnam.

Lallatin, a former chief purchasing officer for the Wyoming State government who graduated in 1972 from the University of Missouri, prides herself on introducing new marketing techniques to move the 2,000 or so police cars and other municipal vehicles that the city replaces every year. Auctions used to be handled by an outside firm, whose small print notices, buried in the *New York Times*, resulted in lackluster bidding. She brought the whole thing in-house and beefed up the promotion with mailing shots and trade journal ads. Thanks mainly to a better average price per vehicle, last year's revenues rose from $500,000 to $1 million.—**Christopher Power**

Off the wall

The state of the economy and the foibles of the business press may be no laughing matters to most people, but Tony Hendra, 41, and Peter Cohn, 27, think otherwise and, in consequence, stand to make a bundle.

Just about to appear on newsstands around the country is *Off the Wall Street Journal II*, a parodic send-up of the *Wall Street Journal* in particular and of financial journalism generally. It's the second in what Hendra, editor, and Cohn, senior editor, hope will be an annual exercise in irreverence. If *OTWSJ II* can match the success of the last year's edition, the management at 22 Cortlandt Street can look forward to getting steamed every April by the paper, parts of which the *WSJ* reportedly characterized as "in very bad taste."

The idea for *Off the Wall* came from two *Journal* reporters, David Blum and Terri Minsky, who thought a parody of the paper might be amusing. (Neither is currently with the paper.) A group of investors eventually decided to run with the idea and picked Hendra as editor. He is a former editor of the *National Lampoon* and coeditor of *Not the New York Times*, a successful satire that appeared in 1978.

Hendra, London-born and Cambridge-educated, has also worked as a comedy writer for television. He and Cohn, a financial reporter turned bond trader, enlisted scores of financial writers—including some "moles" in the *Journal* itself—to put *OTWSJ* together in 1982. More than a few contributors wrote pieces for the laughs. And many were surprised by the paper's commercial success.

Of about 600,000 copies distributed, over 350,000 were sold, at $2 per copy. After deducting printing and distribution costs, the paper netted about $150,000 for backers (contributors were also given small shares of the profits, in addition to small honoraria). This year, however, publisher Larry Durocher hopes to better focus the press run of 660,000 to markets where the paper did especially well last year and was often sold out.

On the laugh meter, *OTWSJ II* is not likely to score as high as its predecessor. For one thing, it inevitably suffers from the "son of" syndrome. For another, and individual highlights aside—the centerfold of Lee Iacocca in a bathing suit; the ad for the Mary Cunningham inflatable doll; the lead piece about the importance of the Hungarian Velcro crop—the material is simply not as funny. Maybe the economy, this year, really is no laughing matter.—**William G. Flanagan**

Off the Wall Street Journal's *Peter Cohn and Tony Hendra*
An eye for parody—and business.

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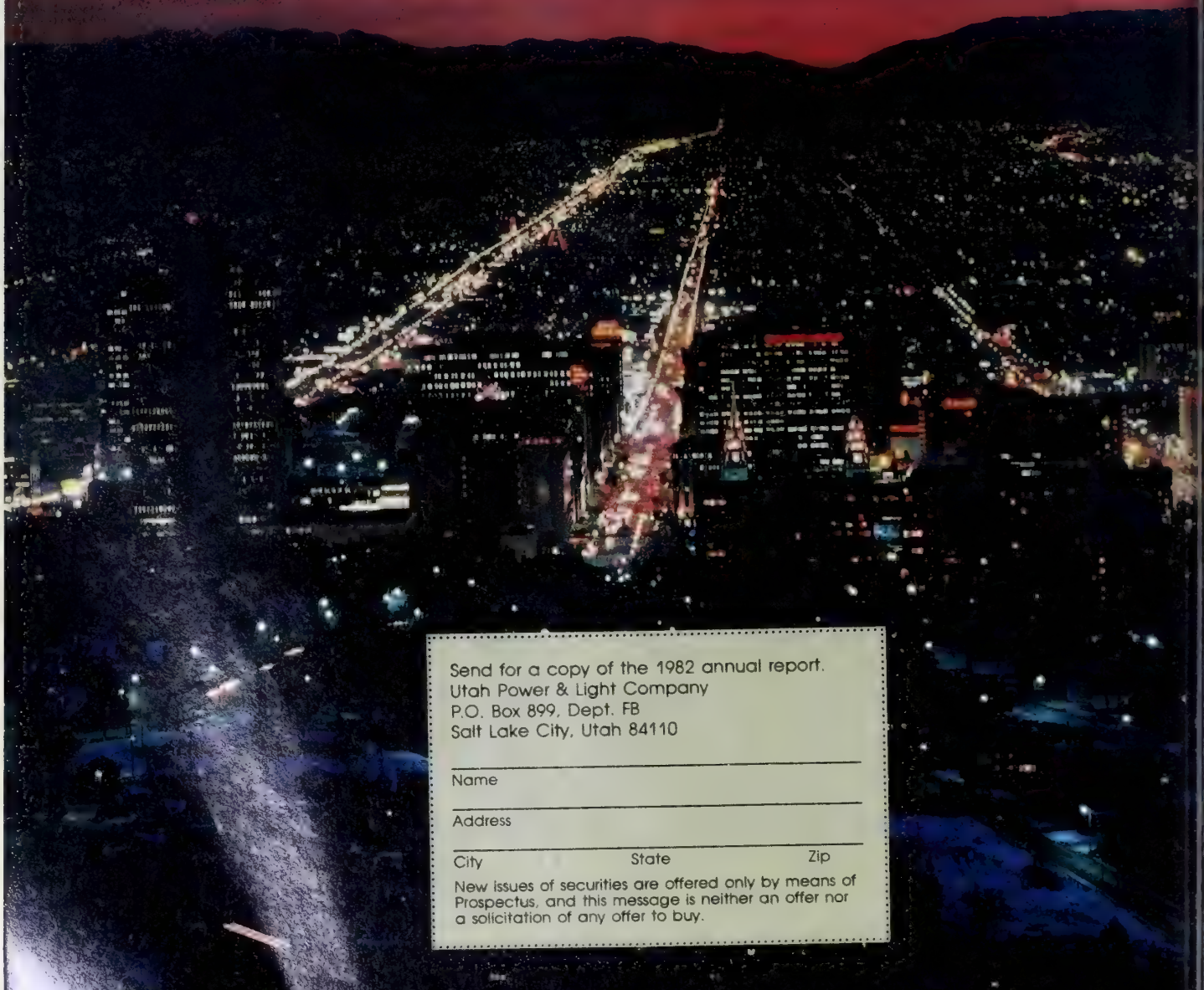

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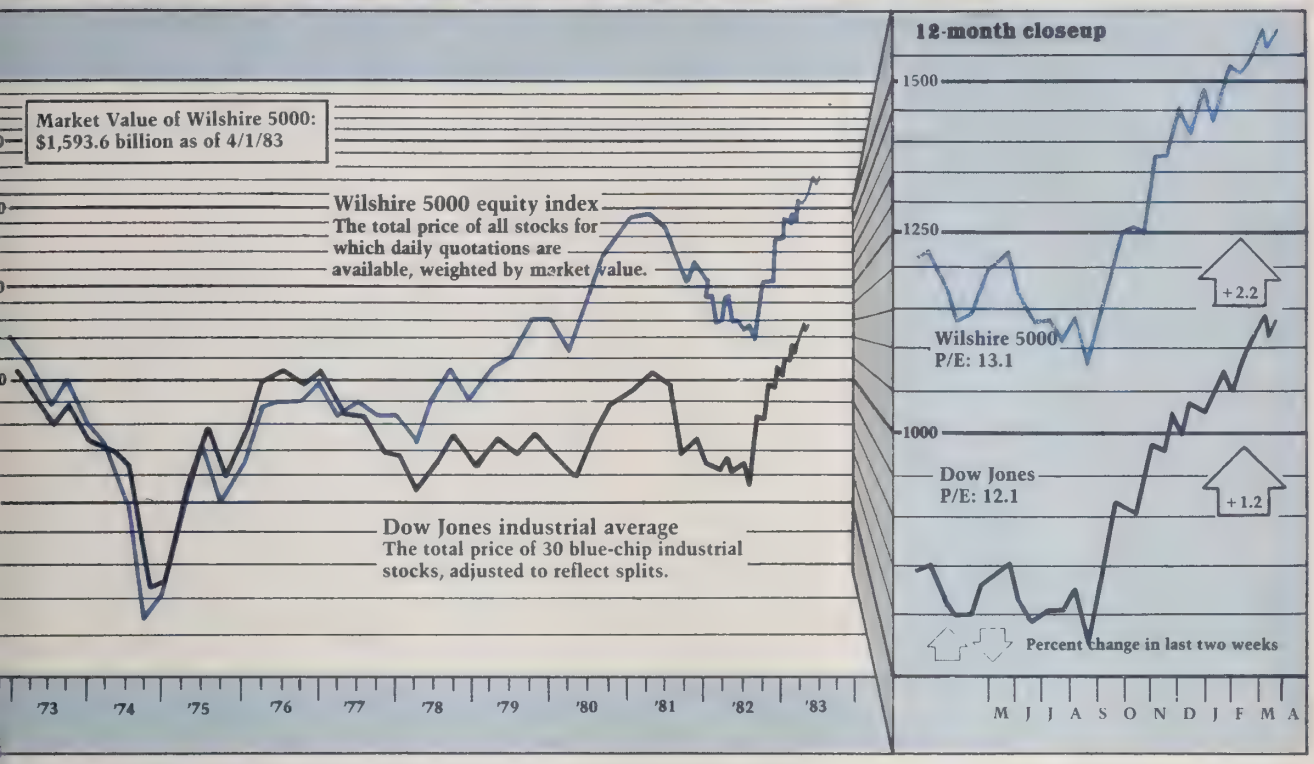
The Forbes/Wilshire 5000 Review



secondary wind. Secondary stocks have been leading e market as the blue chips lose momentum. While the lshire index was up 2.2% over the last two weeks, ASDAQ issues were ahead 2.6% over two weeks and % over four weeks. Amex issues, meanwhile, showed ns of 2.6% and 1.2%, respectively. In contrast, the Dow vanced 1.2% during the last two weeks but lost 0.7% er the past month. Near-panic buying of energy shares ring the last trading day of the reporting period, listed ow, helped push up the NYSE and the Amex.

The yardsticks below show that, over the four-week iod, buyers focused their attention on high-volatility, high-growth and low-price shares. In the last two weeks, however, the market again turned to energy issues for leadership. The question now is whether this can produce sustainable momentum. Of late, bottom-fishing expeditions into energy stocks have produced only brief rallies.

Early in January, for instance, energy outperformed the eight other sectors, often by wide margins. Then investors backtracked for weeks. This time favorable opinions by several major brokerage houses could help support an energy stock rebound. The danger is that, if energy shares slip once again, they could drag down the rest of the market, too.

Close-up On The Equity Markets

Performance of six leading indexes

ercent change	Wilshire 5000	Forbes 500[1]	Dow Jones industrials	NYSE Composite	Amex Market Value Index	NASDAQ Composite
last 4 weeks	0.1	–0.1	–0.7	–0.5	1.2	2.1
last 52 weeks	36.7	34.1	35.6	34.4	47.7	52.7

Stock performance based on five key investor yardsticks

ercent change	Volatility[2]		P/E multiple		Dividend yield		Growth profile[3]		Share price	
	high	low	over 25	under 5	over 7.5%	none	high	low	over $40	under $4
last 4 weeks	4.7	1.2	2.3	5.1	1.9	5.3	5.2	1.8	2.9	4.8
last 52 weeks	91.2	42.8	63.9	106.7	36.5	103.6	103.1	44.8	49.5	81.3

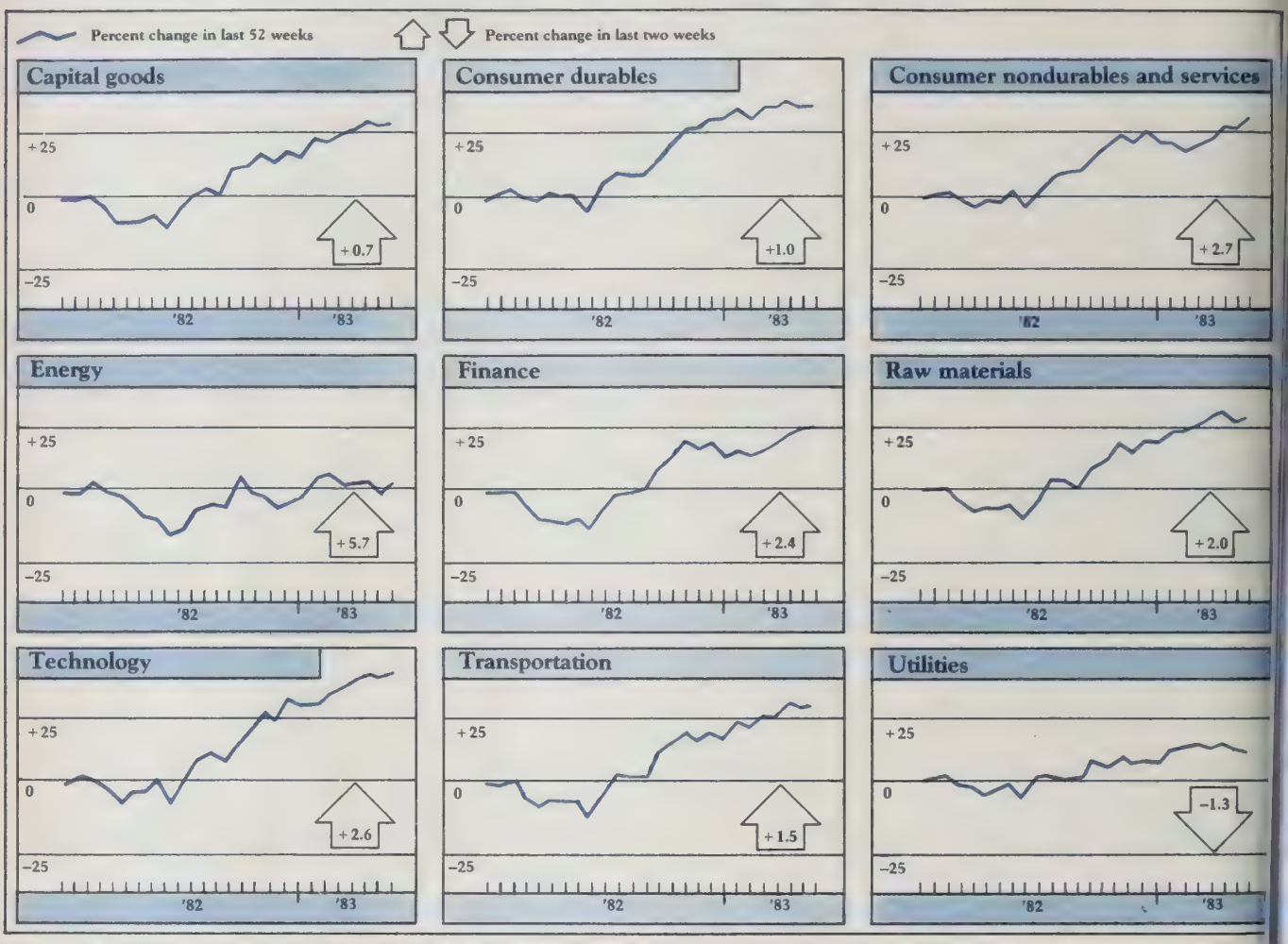
d on sales.
ock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations, low-volatility issues are more stable
antitative evaluation of a stock's growth image, determined by Wilshire Associates.

All data for periods ending 4/1/83. Prepared by Wilshire Associates, Santa Monica, Calif.

Where The Action Is

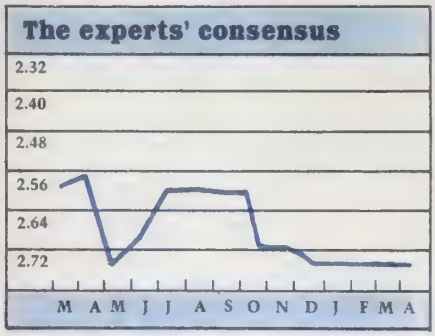
Are the lights going out? Utilities were the only group to lose ground over the last two weeks, and they were also the weakest group over the four-week period. In addition, data from the Autex Block Trading Information System show that for the last several weeks large institutions have been expressing rather strong sell-side interest in these companies. One reason could be that some investors feel interest rates are not likely to decline much further.

There were other laggards, too. Smokestack industries such as consumer durables and capital goods and services are also underperforming the market. Energy shares, on the other hand, lead the group with a 5.7% two-week gain, and consumer nondurables, technology and finance shares also made significant gains.



What The Analysts Think

The market versus the analysts. For several weeks energy and utility issues have been the analysts' top picks. Now the energy stocks have started another rebound, and if you believe what the analysts have been saying, utility issues are also good buys—even though, since early February, the power companies have been dull performers.

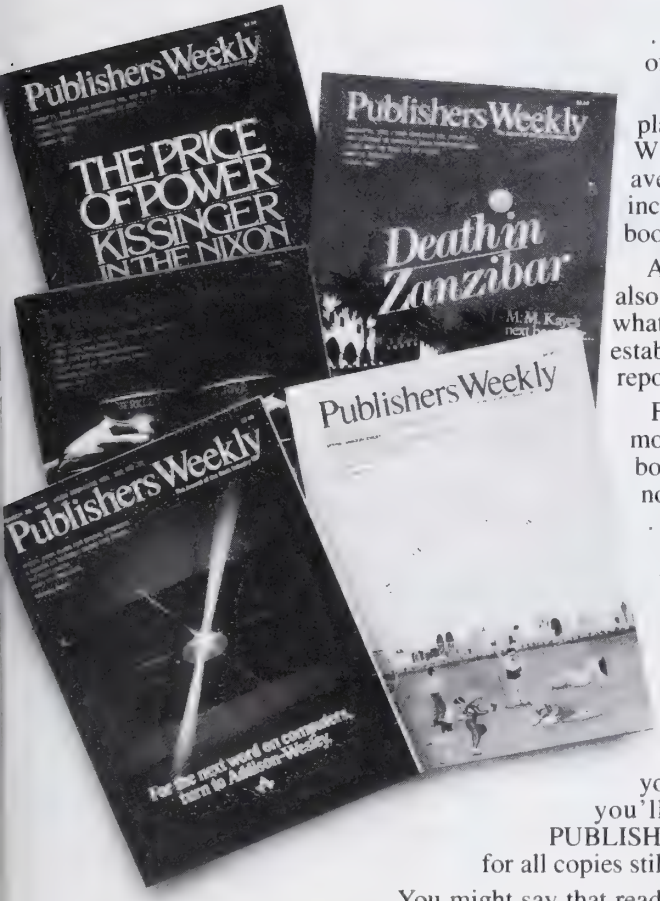


Rank	Sector	Current opinion	Rank 2 weeks ago	Rank 4 weeks ago
1	Energy	2.65	1	1
2	Utilities	2.67	2	2
3	Technology	2.71	3	3
4	Capital goods	2.72	4	4
5	Transportation	2.72	5	6
6	Raw materials	2.76	6	5
7	Finance	2.79	7	7
8	Consumer nondurables	2.81	8	8
9	Consumer durables	2.88	9	9

Opinion ratings are ranked on a scale of 1 (strong buy) to 5 (strong sell). Data reflect the views of 200 institutional analysts. The consensus of opinion graph is the composite rating of 1,200 stocks, while the sector breakdowns correspond to industry groups graphed above. All figures are weighted for market capitalization.

Note: All data for periods ending 4/1/83. Prepared by Wilshire Associates, Santa Monica, Calif.

How can you judge a book before its cover?



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EHD253

The market has been months ahead of the economy. Yet even now, with recovery in sight, analysts are still wearing their belts with suspenders. So what's a poor invester to do?

Wall Street: Wary optimism

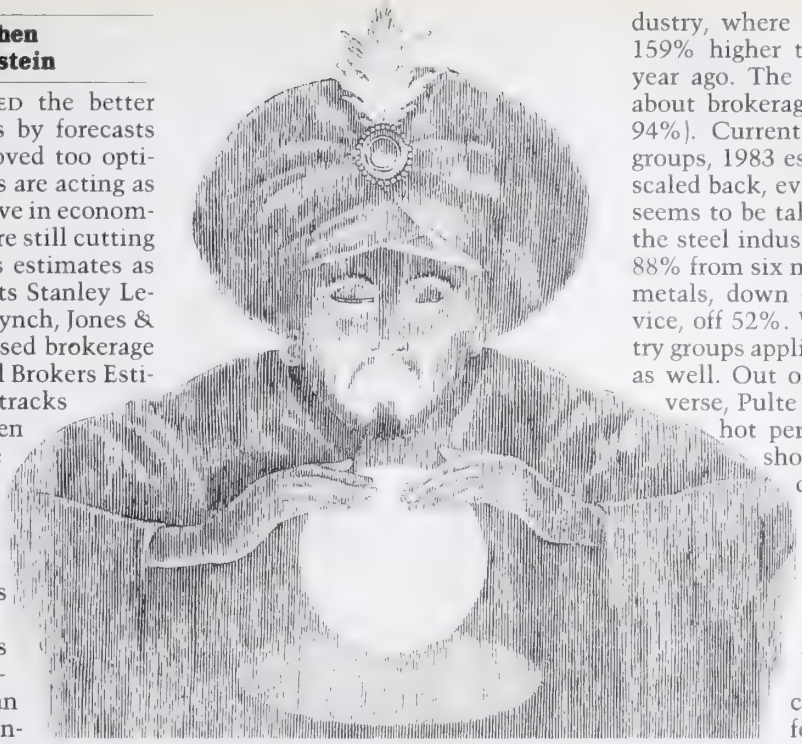
Where the analysts are becoming more optimistic

Over the past six months analysts have raised the consensus earnings estimates on these 29 issues. The revisions range from 152.5% to 26.7%. Those issues where there is little analyst agreement offer more risk but greater speculative opportunity if the optimists are right.

Company/principal business	Recent price	1982 EPS	1983 EPS estimate 9/30/1982	1983 EPS estimate recent	1983 EPS estimate % change	P/E on estimate	Analysts number	Analysts amount of agreement
Pulte Home/building	58½	$1.81	$1.49	$3.75	152.5%	15.6	7	low
HF Ahmanson/savings & loan	31½	–1.88	1.43	3.42	139.3	9.2	12	very low
Golden West Finl/savings & loan	17⅜	–0.97	1.02	2.25	120.6	7.7	12	very low
First Charter Finl/savings & loan	24½	–2.05	0.94	2.06	119.6	11.9	12	low
Asarco/metals, mining	34⅛	–2.00	0.83	1.77	112.4	19.3	13	very low
Finl Corp America/savings & loan	32½	2.40	2.20	4.64	111.2	7.0	4	averag
Imperial Corp of Am/savings & loan	12⅝	–4.30	0.64	1.15	78.4	11.0	11	very low
Certain-Teed/building	22¼	–0.86	0.73	1.29	75.6	17.2	10	very low
Coleco Inds/toys, computer equip	23	2.90	2.21	3.78	71.1	6.1	12	low
Ryland Group/building	52½	1.40	2.10	3.52	67.8	14.9	7	low
Homestake Mining/mining	24⅜	0.50	0.81	1.31	62.6	18.6	11	very low
MacMillan/publishing	27¾	1.81	1.41	2.23	58.0	12.4	3	averag
Phibro-Salomon/brkge, mtls trading	69	4.59	4.79	7.31	52.5	9.4	11	low
Community Psych Cntrs/health care svcs	31⅛	1.60	1.29	1.97	52.2	15.8	19	hig
Great Western Finl/savings & loan	24	–2.75	1.71	2.57	50.2	9.3	14	very low
Lear Petroleum/petroleum	13¼	0.76	0.64	0.96	49.0	13.8	9	very low
Standard-Pacific/building	16¾	0.17	0.89	1.32	47.7	12.7	3	low
Kaufman & Broad/building, insurance	22¾	–1.96	0.88	1.28	46.1	17.8	5	very low
Ryan Homes/building	45	0.56	1.80	2.60	44.3	17.3	15	low
UAL/airline	35½	0.36	2.45	3.51	43.3	10.1	16	very low
Owens-Corning Fibergls/bldg materials	43¾	0.98	2.08	2.98	43.1	14.7	15	low
Petro-Lewis/petroleum	9¾	0.83	0.84	1.19	41.4	8.2	4	low
Magic Chef/appliances	25⅝	0.78	1.29	1.80	39.5	14.2	7	low
Commodore Intl/computer equip	75¾	2.64	3.59	4.95	37.9	15.3	13	low
Jim Walter/building	43¼	0.29	2.94	3.92	33.2	11.0	14	low
Levitz Furniture/furniture	61½	1.90	3.12	4.11	31.6	15.0	4	low
Grumman/aerospace	53⅛	4.13	4.77	6.21	30.2	8.6	12	very low
Quaker State Oil Ref/petroleum	20	1.77	1.62	2.09	29.1	9.6	4	averag
Intergraph/computer equip	30	0.56	0.72	0.91	26.7	33.0	9	averag

Source: Institutional Brokers Estimate System (IBES), a service of Lynch, Jones & Ryan

By Steve Kichen and Paul Bornstein



AFTER BEING BURNED the better part of two years by forecasts the recession proved too optiistic, security analysts are acting as they are afraid to believe in economc recovery. "Analysts are still cutting wice as many earnings estimates as ıey are raising," reports Stanley Leine, vice president of Lynch, Jones & yan, the New York-based brokerage rm whose Institutional Brokers Estiıate System (IBES) tracks ırnings estimates. Even), there seem to be enty of upbeat proouncements. The rao of increased estiates to decreased estiates, while still low, is imbing.

Hardly any group is ining faster in the estiation of analysts than e savings and loan industry, where estimates are running 159% higher than they were half a year ago. The seers are also excited about brokerage firms (estimates up 94%). Currently, for most industry groups, 1983 estimates are still being scaled back, even as cyclical recovery seems to be taking hold. Hardest hit: the steel industry, where they are off 88% from six months ago; nonferrous metals, down 62%; and oilfield service, off 52%. What applies to industry groups applies to individual stocks as well. Out of the whole IBES universe, Pulte Home, a spectacularly hot performer on the Amex, shows the greatest increase in 1983 earnings estimates over the last six months. The biggest loser in popularity: Amsted Industries, slashed an average 78.8%.

It is an interesting challenge to find a use for earnings estimates

Where the analysts are becoming less optimistic

Despite the signs of economic recovery, analysts are still scaling down more forecasts than they are scaling up. Below are 80 issues that have been hit the hardest in Wall Street reports. These consensus estimates have been reduced 40% or more over the last six months.

Company/principal business	Recent price	1982 EPS	1983 EPS estimate 9/30/1982	1983 EPS estimate recent	1983 EPS estimate % change	P/E on estimate	Analysts number	Analysts amount of agreement
Amsted Inds/railroad equipment	27⅜	$1.65	$2.55	$0.54	−78.8%	50.7	9	very low
Parker Drilling/oilfield equip and svcs	7¾	2.65	2.30	0.56	−75.6	13.8	17	very low
Seafirst Corp/bank holding	14	−5.59	3.85	0.99	−74.3	14.1	15	very low
Jamesbury/valves	16¾	1.47	1.83	0.52	−71.6	32.2	7	very low
Westmoreland Coal/coal	15¾	1.14	2.73	0.78	−71.4	20.2	6	very low
Simpson Inds/auto equipment	16¾	1.35	2.28	0.66	−71.1	25.4	5	very low
Timken/auto equipment	55⅛	−0.27	6.73	2.00	−70.3	27.6	6	very low
Tandy Brands/specialty retail	15	0.26	1.65	0.55	−66.7	27.3	3	average
Hanna Mining/mining	26¼	−2.18	2.61	0.89	−65.9	28.4	7	very low
NL Inds/oilfield equip and svcs	14⅜	2.90	4.24	1.47	−65.3	9.8	19	very low
Joy Manufacturing/machinery	24½	4.27	4.15	1.48	−64.3	16.6	18	low
Oak Inds/electronics	11⅝	0.25	2.65	0.96	−63.8	12.1	6	very low
Caesars World/hotel, gaming	10½	0.30	1.46	0.53	−63.6	19.8	7	very low
GEO Intl/oilfield equip and svcs	9	1.47	2.22	0.81	−63.5	11.1	4	very low
Baker Intl/oilfield equip and svcs	16¼	3.60	4.05	1.50	−63.0	10.8	28	very low
Caterpillar Tractor/machinery	44¼	−2.04	3.97	1.48	−62.7	29.9	18	very low
Kaiser Cement/cement	30½	2.38	1.71	0.64	−62.5	47.7	9	very low
Ingersoll-Rand/machinery	46¼	2.35	6.13	2.42	−60.5	19.1	18	very low
Carpenter Technology/specialty steel	40¼	3.85	4.06	1.64	−59.6	24.5	8	very low
Inland Steel/steel	30⅛	−6.27	1.76	0.73	−58.5	41.3	15	very low
AE Staley Mfg/food processing	24⅝	2.75	3.17	1.32	−58.4	18.7	14	very low
Wynn's Intl/auto equipment	14⅜	−1.87	2.83	1.20	−57.6	12.0	4	very low
Smith Intl/oilfield equip and svcs	18¾	3.61	4.92	2.10	−57.3	8.9	25	very low
United Cable TV/cable TV	19⅝	1.38	1.33	0.58	−56.5	33.8	10	very low
Bearings Inc/bearings	33¾	3.01	3.78	1.67	−55.8	20.2	7	very low
Aluminum Co of Am/aluminum	31⅞	−0.15	2.81	1.24	−55.8	25.7	20	very low
Rexnord/machinery	14¾	0.35	1.39	0.62	−55.3	23.8	5	very low
Storer Communications/broadcasting	29¼	0.29	1.74	0.79	−54.6	37.0	14	very low
Northwest Industries/multicompany	33¼	8.75	9.37	4.34	−53.7	7.7	8	very low
Masco/building	33½	1.48	4.56	2.11	−53.7	15.9	12	high

Source: Institutional Brokers Estimate System (IBES), a service of Lynch, Jones & Ryan

Statistical Spotlight

when, in general, estimates seem to trail after changes in the stock market. There is some truth in the old joke that analysts raise their earnings estimates when stocks go up and lower them when stocks go down.

Jokes aside, professors Edwin Elton and Martin Gruber at New York University have done extensive research on the IBES data. They claim to have shown that information contained in the consensus estimate is already included in the share price. It is not what the analysts say, then, but the surprises on which the analysts did not coun that subsequently move stock above or below the averages.

They also uncovered an even mor interesting—and possibly more use ful—phenomenon. Note the last tw columns in each table. One tells yo how many analysts prognosticated o that stock. The other column, labele

Where the analysts are becoming less optimistic

Company/principal business	Recent price	1982 EPS	1983 EPS estimate 9/30/1982	1983 EPS estimate recent	1983 EPS estimate % change	P/E on estimate	Analysts number	Analysts amount o agreemen
Occidental Petrol/energy, food proc	18⅞	$0.69	$3.82	$1.78	−53.4%	10.6	14	very low
Hughes Tool/oilfield equip and svcs	16⅜	2.65	3.80	1.78	−53.2	9.2	24	very low
Pacific Resources/petroleum	8¾	0.79	1.87	0.88	−52.9	9.9	3	very low
Alcan Aluminium/aluminum	30⅜	−0.69	2.21	1.05	−52.4	28.9	16	very low
Franklin Electric/electrical equipment	17½	0.28	2.07	0.99	−52.2	17.7	4	low
Intermedics/health care prods	20⅝	0.78	2.56	1.24	−51.6	16.6	11	very low
RLC/trucking	12	0.51	1.17	0.57	−51.4	21.1	3	very low
Dresser Industries/oilfield equip and svcs	16⅛	2.19	2.83	1.38	−51.2	11.7	24	very low
Daniel Inds/oilfield equip and svcs	9½	1.74	1.99	0.98	−50.7	9.7	3	low
Cross & Trecker/machinery	26⅜	3.13	1.11	0.55	−50.5	48.0	16	very low
Parker-Hannifin/machinery	26¾	2.12	2.50	1.25	−50.0	21.4	14	very low
Allegheny Intl/multicompany	29⅝	0.21	5.76	2.95	−48.8	10.0	6	very low
Fruehauf/trucking	31¾	−2.47	3.15	1.62	−48.6	19.6	5	very low
National Micronetics/computer equip	20½	1.01	1.36	0.70	−48.5	29.3	4	averag
Gelco/transp and leasing svcs	19¾	2.51	3.20	1.66	−48.1	11.9	9	very lo
Cameron Iron Works/oilfield equip, svcs	17⅞	5.02	4.36	2.28	−47.7	7.8	9	lo
Eaton Corp/auto equipment	34	−6.74	4.66	2.46	−47.2	13.8	16	very lo
Warner Communications/entertainment	28¾	3.46	6.77	3.61	−46.7	8.0	22	lo
Lone Star Inds/cement	34¼	0.05	1.95	1.04	−46.7	32.9	10	very lo
Datapoint/computer equip	21¾	0.12	1.17	0.63	−46.3	34.5	14	very lo
Frontier Holdings/airline	19⅝	1.67	3.70	2.00	−46.0	9.8	12	lo
Stewart & Stevenson/machinery	12⅜	1.84	2.88	1.56	−45.9	7.9	4	averag
Cooper Inds/machinery	28	2.75	4.31	2.35	−45.5	11.9	18	lo
Measurex/electrical equipment	22⅜	−0.10	1.25	0.68	−45.5	32.9	5	lo
Graniteville/textiles	10⅞	−3.26	1.00	0.55	−45.0	19.8	4	very lo
Sabine/oil and gas explor, dev, prod	18½	1.54	2.33	1.29	−44.6	14.3	15	very lo
Moore McCormack Res/transp, resrcs	26½	1.09	3.45	1.91	−44.6	13.9	8	lo
PSA/airline	28½	3.16	4.80	2.68	−44.2	10.6	8	very lo
Materials Research/industrial equipment	27⅜	0.21	1.21	0.68	−43.8	40.3	3	very lo
Siltec/semiconductors	11¾	−0.19	1.03	0.58	−43.5	20.3	3	very lo
Midland-Ross/machinery	16¾	0.10	2.23	1.26	−43.5	13.3	8	very lo
Celanese/chemicals, textiles	55¾	0.05	6.67	3.78	−43.3	14.7	19	lo
Omark Industries/machinery	20⅛	1.86	2.06	1.17	−43.1	17.2	9	lo
Norton Co/machinery	38⅝	1.13	4.65	2.67	−42.6	14.5	8	lo
Spectra-Physics/precision instruments	25¼	0.22	1.08	0.62	−42.5	40.7	9	very lo
Zenith Radio/electronics	16½	−1.15	0.89	0.51	−42.4	32.4	10	very lo
Manitowoc/construction equipment	18¾	2.95	1.63	0.94	−42.3	19.9	4	very lo
Digicon/oilfield services	9¾	2.81	2.61	1.51	−42.2	6.5	8	very lo
Ideal Basic Inds/cement	22⅛	−1.81	1.29	0.75	−42.0	29.5	6	very lo
Tonka/toys	18	−0.65	2.07	1.20	−41.9	15.0	3	very lo
Delta Air Lines/airline	49¼	0.52	2.61	1.52	−41.8	32.4	18	very lo
Natomas/oil and gas explor, dev	14⅜	0.64	4.55	2.66	−41.6	5.4	16	very lo
GCA/precision instruments	36⅜	−1.77	1.49	0.87	−41.6	41.8	19	very lo
Allen Group/auto equipment	1⅞	−2.44	2.22	1.30	−41.4	1.4	7	lo
Petrolane/oilfield equip and svcs	12⅞	2.00	2.26	1.33	−41.2	9.7	14	very lo
AMR Corp/airline	27¼	−1.00	3.88	2.29	−41.0	11.9	19	very lo
Rollins Inc/industrial services	14⅛	1.70	2.08	1.23	−41.0	11.5	8	lo
GATX/railroad equipment	29⅛	2.41	3.84	2.29	−40.3	12.7	10	lo
XTRA/trucking	24½	1.29	2.70	1.62	−40.1	15.1	4	very lo
Gifford-Hill/cement	19⅛	0.07	2.03	1.22	−40.0	15.7	5	lo

Source: Institutional Brokers Estimate System (IBES), a service of Lynch, Jones & R

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Statistical Spotlight

"amount of agreement," describes the coefficient of variation—a measure of how close or far apart the analysts were in their estimates. There are five agreement ranks, from "very high" to "very low."

According to Elton and Gruber, a low or very low level of agreement among analysts can sometimes point to better investment opportunities than a very high level of agreement. Little in the way of market surprise would be expected from a utility like Houston Industries *(p.192)*, for example, which has a high level of agreement on its consensus estimate from 19 analysts.

However, Elton and Gruber believe it is still possible to earn above-market returns, if you can locate those stocks for which analysts most underestimate earnings. Therefore, issues graded "very low" in consensus could turn out to be superior performers, if final earnings figures range on the high side. "In uncertainty there is profit," is what they are telling us. There is often widespread divergence on estimates of steel, auto parts, trucking, railroads and airlines.

The tables starting on pages 182 and 183 list 109 companies that have had significant changes in estimates—either up or down—over the last six months. The list is thickly populated with machinery and oilfield equipment and service companies.

Starting on pages 188 and 190 are alphabetical lists for 51 companies that analysts expect to make major earnings moves in 1983, versus 1982. A number of consumer and service areas—for example, insurance, building materials, appliances and auto equipment—are well represented. But if past history is any guide, the best investment opportunities could lie with industries in which there is still heavy pessimism and little agreement, such as oilfield equipment and services.

Where the analysts predict declines

Last year was tough enough for most firms, but analysts expect this year to be even worse for these 38 companies. The expected declines in earnings range from 27.5% to 82.4%. But, for contrarians, those issues in which the experts prove too pessimistic can rebound sharply.

Company/principal business	Recent price	Earnings per share 1982	Earnings per share 1983 est	Earnings per share % change	P/E on estimate	Analysts number	Analysts amount of agreement
Amstar/sugar processing	25⅞	$4.31	$2.86	–33.6%	9.0	4	very low
Amsted Industries/railroad equipment	27⅜	1.65	0.54	–67.3	50.7	9	very low
Baker Intl/oilfield equip, svcs	16¼	3.60	1.50	–58.3	10.8	28	very low
Bearings Inc/bearings	33¾	3.01	1.67	–44.5	20.2	7	very low
Cameron Iron Works/oilfield eq, svcs	17⅞	5.02	2.28	–54.6	7.8	9	low
Carpenter Technology/specialty steel	40¼	3.85	1.64	–57.4	24.5	8	very low
Cross & Trecker/industrial machinery	26⅜	3.13	0.55	–82.4	48.0	16	very low
Daniel Inds/oilfield equip, svcs	9½	1.74	0.98	–43.7	9.7	3	low
Digicon/oilfield services	9¾	2.81	1.51	–46.3	6.5	8	very low
Dresser Industries/oilfield equip, svcs	16⅛	2.19	1.38	–37.0	11.7	24	very low
Enterra/oilfield equip, svcs	16	3.17	1.13	–64.4	14.2	3	very low
Gelco/transp, leasing svcs	19¾	2.51	1.66	–33.9	11.9	9	very low
GEO Intl/oilfield equip, svcs	9	1.47	0.81	–44.9	11.1	4	very low
Global Marine/oilfield services	7¾	2.71	1.93	–28.8	4.0	16	low
Helmerich & Payne/drilling	17⅜	2.98	2.16	–27.5	8.0	17	average
Hughes Tool/oilfield equip, svcs	16⅜	2.65	1.78	–32.8	9.2	24	very low
International Minerals/minerals	39	4.56	3.27	–28.3	11.9	16	low
Jamesbury/valves	16¾	1.47	0.52	–64.6	32.2	7	very low
Joy Manufacturing/machinery	24½	4.27	1.48	–65.3	16.6	18	low
Kaiser Cement/cement	30½	2.38	0.64	–73.1	47.7	9	very low
Manitowoc/construction equip	18¾	2.95	0.94	–68.1	19.9	4	very low
National Micronetics/computer equip	20½	1.01	0.70	–30.7	29.3	4	average
NL Industries/oilfield equip, svcs	14⅜	2.90	1.47	–49.3	9.8	19	very low
Northwest Industries/multicompany	33¼	8.75	4.34	–50.4	7.7	8	very low
Omark Industries/machinery	20⅛	1.86	1.17	–37.1	17.2	9	low
Parker Drilling/equip, svcs	7¾	2.65	0.56	–78.9	13.8	17	very low
Parker-Hannifin/machinery	26¾	2.12	1.25	–41.0	21.4	14	very low
Petrolane/oilfield equip, svcs	12⅞	2.00	1.33	–33.5	9.7	14	very low
HH Robertson/machinery	30¼	5.57	4.01	–28.0	7.5	3	average
Rollins Inc/industrial services	14⅛	1.70	1.23	–27.6	11.5	8	low
Rowan Cos/onshore drilling	9¾	2.36	1.40	–40.7	7.0	19	very low
Simpson Industries/auto equipment	19¾	1.35	0.66	–51.1	29.9	5	very low
Smith Intl/oilfield equip, svcs	18¾	3.61	2.10	–41.8	8.9	25	very low
AE Staley Mfg/food processing	24⅝	2.75	1.32	–52.0	18.7	14	very low
Unifi/textiles	16¾	1.87	1.15	–38.5	14.6	3	low
United Cable TV/cable TV	19⅝	1.38	0.58	–58.0	33.8	10	very low
Westmoreland Coal/coal	15¾	1.14	0.78	–31.6	20.2	6	very low
Zapata/oilfield equipment	14⅝	4.73	3.40	–28.1	4.3	11	average

Source: International Brokers Estimate System (IBES), a service of Lynch, Jones & Ryan.

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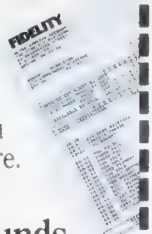

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Statistical Spotlight

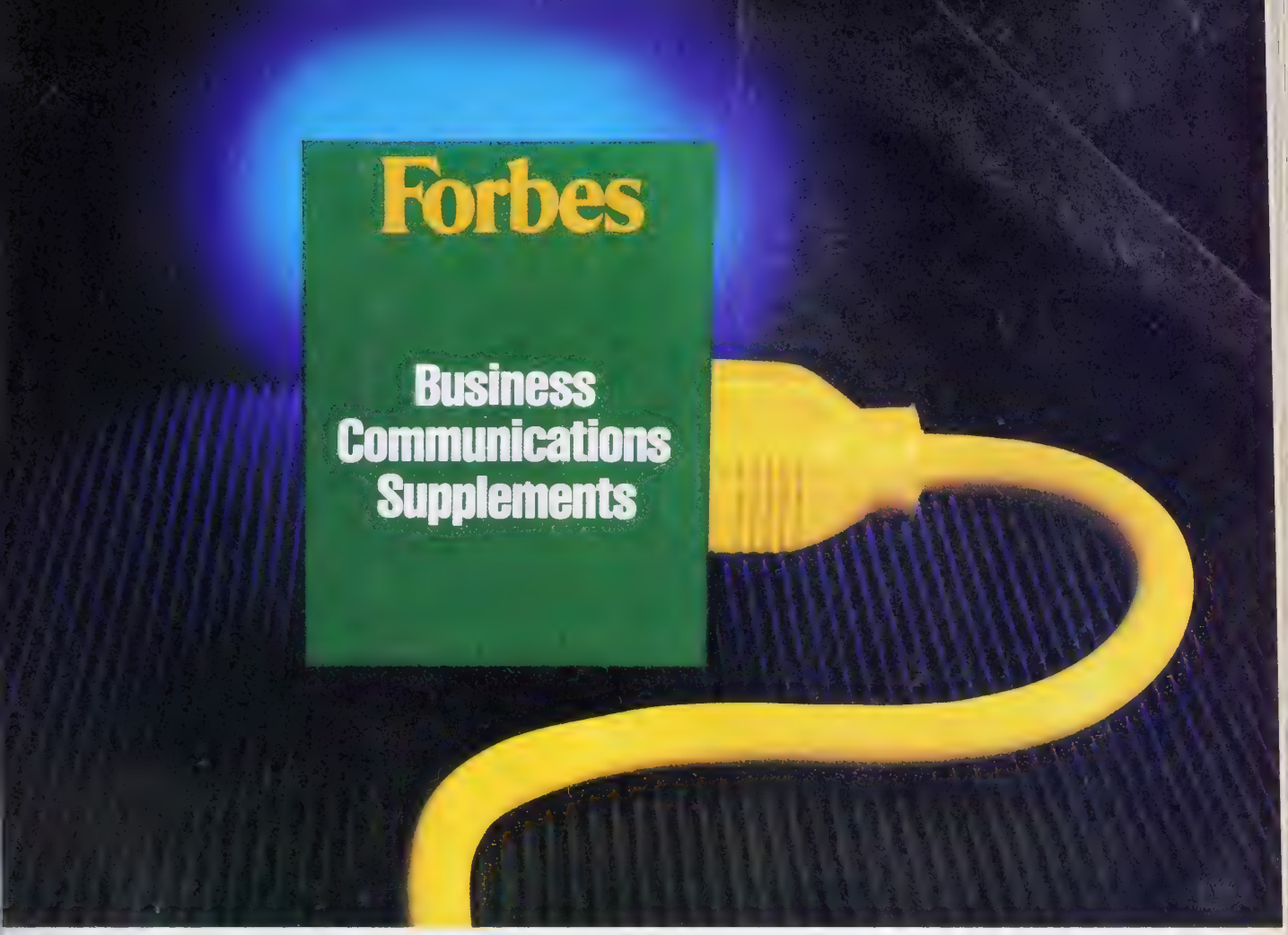
Where the analysts expect the biggest gains

Wall Street's experts are betting that these issues will show earnings gains of 58.3% or more in 1983. But remember: There is very high agreement of opinion on only two issues, TRE Corp. and Lennar. In contrast, there is wide disagreement among analysts on 16 of these stocks.

Company/principal business	Recent price	Earnings per share 1982	Earnings per share 1983 est	Earnings per share % change	P/E on estimate	Analysts number	Analysts amount of agreement
Alexander & Alexander/insurance	22⅛	$0.60	$1.99	231.7%	11.1	14	average
Airborne Freight/freight forwarding	20¾	0.77	1.38	79.2	15.0	11	low
Amerada Hess/petroleum	21⅛	2.00	3.50	75.0	6.0	17	low
American Standard/building materials	33⅝	1.30	2.42	86.2	13.9	13	low
AMF/recreation, ind equip	16⅞	0.53	2.05	286.8	8.2	5	average
Anchor Hocking/packaging, containers	25¾	1.25	2.16	72.8	11.9	9	low
Armstrong World Inds/home furnishgs	27⅝	0.95	1.80	89.5	15.3	14	average
AVX/electronics	27	0.64	1.37	114.1	19.7	3	low
AXIA/construction equip	20⅛	0.65	1.37	110.8	14.7	3	low
Bear Creek/mail-order sales	22¼	1.34	2.18	62.7	10.2	3	average
Brock Hotel/hotels	9	0.55	0.91	65.5	9.9	4	very low
Brunswick/recreation prods	27¼	1.49	3.12	109.4	8.7	7	low
Burroughs/computer equipment	46⅝	2.17	4.51	107.8	10.3	23	average
Cascade Natural Gas/natural gas	10⅛	0.85	1.46	71.8	6.9	3	low
CBS/broadcasting	68¾	4.01	6.74	68.1	10.2	21	average
Champion Spark Plug/auto equipment	9½	0.70	1.14	62.9	8.3	6	very low
Chesapeake Corp Va/pkg, containers	31½	1.29	2.07	60.5	15.2	6	low
Chrysler/automotive	16⅝	0.97	2.95	204.1	5.6	14	very low
Cipher Data Prods/computer equip	30¼	0.60	0.95	58.3	31.8	3	NA
Commodore Intl/computer equip	75¾	2.64	4.95	87.5	15.3	13	low
Continental Illinois/bank holding	22⅝	2.12	3.90	84.0	5.8	24	low
Cooper Labs/health care prods	77⅝	2.42	4.52	86.8	17.2	3	average
Corcom/electronics	24	0.94	1.54	63.8	15.6	4	average
CTS Corp/electronics	37½	1.57	2.51	59.9	14.9	5	low
Cordis/health care equipment	80½	0.75	2.83	277.3	28.4	9	low
Core Labs/oilfield equip, svcs	10¾	0.60	1.01	68.3	10.6	3	low
Crompton & Knowles/specialty chems	24	1.05	2.45	133.3	9.8	3	average
Dana Corp/auto equipment	33⅞	1.43	2.75	92.3	12.3	13	low
Delta Air Lines/airline	49¼	0.52	1.52	192.3	32.4	18	very low
Dr Pepper/beverages	12½	0.58	1.21	108.6	10.3	17	low
Ducommun/electronics	39	1.39	2.77	99.3	14.1	5	low
El Paso Co/gas pipeline	16⅝	1.08	2.30	113.0	7.2	16	low
Electro-Biology/health care equipment	36¼	0.75	1.57	109.3	23.1	8	average
Emery Air Freight/freight forwarding	15½	0.65	1.29	98.5	12.0	14	low
Federal Co/food processing	27¼	2.14	3.94	84.1	6.9	6	high
Ferro Corp/building materials	32⅜	1.37	2.43	77.4	13.3	9	low
Freeport-McMoRan/metals, mining	20¼	0.95	1.74	83.2	11.6	14	low
Financial Corp of Am/savings & loan	32½	2.40	4.64	93.3	7.0	4	average
First Oklahoma Bancorp/bank holding	16½	2.02	3.22	59.4	5.1	3	average
Fremont General/insurance	24	0.54	1.37	153.7	17.5	7	very low
GAF/building materials	16⅜	1.01	1.63	61.4	10.0	4	very low
General Dynamics/aerospace	45½	2.40	4.57	90.4	10.0	21	average
General Motors/automotive	59⅛	3.09	8.29	168.3	7.1	18	low
General Pub Util/electric utility	7½	0.55	0.97	76.4	7.7	10	very low
GenRad/electronics	31½	0.63	1.12	77.8	28.1	16	average
General Tire & Rubber/tire and rubber	34	0.78	3.69	373.1	9.2	8	low
Gulfstream Land & Dev/land dev, bldg	26¼	1.01	2.42	139.6	10.8	3	very low
Hawaiian Electric/electric utility	32½	2.35	3.78	60.9	8.6	10	average
Holiday Inns/hotels, gaming	39½	1.94	3.11	60.3	12.7	19	average
Walter E Heller Intl/finance	30⅛	1.34	2.94	119.4	10.2	4	average
Homestake Mining/mining	24⅜	0.51	1.31	156.9	18.6	11	very low
HON Inds/office equipment	22¾	1.04	1.75	68.3	13.0	4	low
Hoover Universal/auto equip	28¼	1.79	2.94	64.2	9.6	5	average

NA: Not available.

Source: Institutional Brokers Estimate System (IBES), a service of Lynch, Jones & Ryan



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Statistical Spotlight

Where the analysts expect the biggest gains

Company/principal business	Recent price	Earnings per share 1982	Earnings per share 1983 est	Earnings per share % change	P/E on estimate	Analysts number	Analysts amount of agreement
Horn & Hardart/restaurants	26½	1.14	2.08	82.5	12.7	3	low
Houston Industries/electric utility	20¾	1.62	3.86	138.3	5.4	19	high
Insilco/metal fabricating	23¼	0.85	1.90	123.5	12.2	5	average
Intel/electronics	46¾	0.65	1.35	107.7	34.6	29	low
Intergraph/computer equipment	30	0.56	0.91	62.5	33.0	9	average
Interlake/steel	33⅝	0.92	2.70	193.5	12.5	5	low
Intermedics/health care products	20⅝	0.78	1.24	59.0	16.6	11	very low
InterNorth/natural gas	25⅛	3.01	4.84	60.8	5.2	16	average
Jackson National Life/insurance	27¾	1.44	3.11	116.0	8.9	4	high
Lennar/building	25	0.51	1.38	170.6	18.1	3	very high
Levitz Furniture/furniture	61½	1.90	4.11	116.3	15.0	4	low
Magic Chef/appliances	25⅝	0.78	1.80	130.8	14.2	7	low
Manufacturers National/bank holding	29¾	2.38	6.00	152.1	5.0	3	average
Mattel/toys	11¾	1.78	2.94	65.2	4	8	average
Mesa Petroleum/petroleum	10⅝	0.99	1.61	62.6	6.6	18	low
Moore McCormack Res/trans, natl res	26½	1.09	1.91	75.2	13.9	8	low
Murray Ohio Mfg/recreation equip	23	1.63	2.83	73.6	8.1	8	low
Naples Federal S&L/savings & loan	26⅝	0.70	2.95	321.4	9.0	3	high
National Gypsum/building materials	33¼	0.89	1.99	123.6	16.7	9	low
Natomas/oil explor, development	14⅜	0.64	2.66	315.6	5.4	16	very low
Newmont Mining/mining	49¼	1.76	3.21	82.4	15.3	17	low
Northern Ind Pub Svc/electric utility	13½	0.90	1.58	75.6	8.5	15	low
Northwestern Natl Life/insurance	35¾	1.33	5.06	280.5	7.1	4	low
Norton Co/industrial prods	38⅝	1.13	2.67	136.3	14.5	8	low
Occidental Petrol/energy, food proc	18⅞	0.69	1.78	158	10.6	14	very low
Oshman's Sporting Gds/specialty retail	23¼	1.05	1.73	64.8	13.4	3	high
Owens-Corning Fiber/bldg materials	43¾	0.98	2.98	204.1	14.7	15	low
Owens-Illinois/paper and forest prods	32⅝	1.28	3.70	189.1	8.8	12	average
Ozark Air Lines/airline	15¼	0.77	1.88	144.2	8.1	10	very low
PACCAR/automotive	97¾	4.11	6.79	65.2	14.4	9	very low
Pacific Lumber/paper and forest prods	27⅝	0.89	1.55	74.2	17.8	10	low
Pennwalt Corp/specialty chemicals	37¾	2.10	3.81	81.4	9.9	7	low
Pioneer Corp/natural gas	18½	1.66	3.08	85.5	6.0	18	low
Pope & Talbot/forest products	21⅛	0.72	1.69	134.7	12.5	4	very low
Potlatch/forest products	41½	0.87	2.29	163.2	18.1	18	low
Pulte Home/building	58½	1.81	3.75	107.2	15.6	7	low
Puritan Fashions/apparel	22½	2.19	3.58	63.5	6.3	3	average
Progressive (Ohio)/insurance	42¾	2.43	3.86	58.8	11.1	7	low
Robertshaw Controls/appliances	30⅜	1.55	2.64	70.3	11.5	3	average
Ryan Homes/building	45	0.56	2.60	364.3	17.3	15	low
Ryland Group/building	52½	1.40	3.52	151.4	14.9	7	low
St Regis Paper/paper and forest prods	31⅜	1.29	2.33	80.6	13.5	19	low
Sealed Air/packaging, containers	32¼	1.35	2.26	67.4	14.3	10	low
Soo Line RR/railroad	33⅛	2.01	3.53	75.6	9.4	3	low
Southern Union/natural gas	16⅞	1.96	3.13	59.7	5.4	5	averag
Superior Ind Intl/auto equipment	10⅝	0.58	1.20	106.9	8.9	3	low
System Inds/computer equipment	13½	0.54	0.96	77.8	14.1	4	averag
Tandon/computer equipment	40	0.73	1.23	68.5	32.5	12	averag
Thermo Electron/machinery	22½	0.60	1.00	66.7	22.5	7	very low
Towle Manufacturing/household prods	23½	1.16	2.63	126.7	8.9	5	averag
TRE Corp/aerospace	31	0.88	1.51	71.6	20.5	3	very high
Trans World/airline	33⅝	0.54	3.31	513.0	10.2	18	low
Tyler Corp/building materials	24½	1.08	1.85	71.3	13.2	7	low
Tymshare/computer services	22	0.73	1.18	61.6	18.6	14	low
United Energy Res/natural gas	27	4.25	7.27	71.1	3.7	16	averag
US Home/building	31⅛	0.63	2.07	228.6	15.0	14	low
US Surgical/health care prods	28¼	0.80	1.33	66.3	21.2	13	low
Weyerhaeuser/forest products	38	0.90	2.15	138.9	17.7	19	low
HJ Wilson/retail	18⅞	0.72	2.14	197.2	8.8	8	averag
Yellow Freight System/trucking	23⅞	0.75	1.79	138.7	13.3	14	low

Source: Institutional Brokers Estimate System (IBES), a service of Lynch, Jones & Ryan

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Lloyds Bank International

Don't think technology is the secret to venture capital success. Here's a savvy startup team that puts its priorities elsewhere.

Beyond hand-holding

By John A. Byrne

OAK INVESTMENT PARTNERS is a venture capital firm with an $85 million pool of money to invest. That's big when it comes to backing startups—and Oak's big-name investors are big winners. The folks who put up its money, including Citicorp, Connecticut General and Harvard Management Corp., just love Oak's 55% compound annual return. To be sure, these have been happy days for many entrepreneurs, but 55% is still impressive.

Like any good venture capital outfit, however, Oak offers lots more than money. Founders Edward Glassmeyer and Stewart Greenfield provide contacts, managerial experience and plain old hand-holding that often outweigh their financial commitment. "You can't survive in this business if it's just the money," says Glassmeyer, munching a sandwich in his modern office overlooking Connecticut's Saugatuck River. "People come in here looking for help."

And some are even willing to pay for it. When Alan Shugart's Seagate Technology sought seed money in 1980, Oak valued the startup at $5 million—$7 million less than other would-be backers. But Shugart chose Oak. Similarly, when Telxon Corp. looked for additional financing the following year, Chief Executive Robert Meyerson agreed to Oak's $2 per-share valuation despite other higher offers. "The money wasn't as important as getting Glassmeyer on our board," says Meyerson.

Why? Simply this: Oak has a top-notch record at launching successful startups, and its backing can open doors. Venture capital isn't that different from any other business; you judge an unknown entrepreneur by the company he keeps.

Oak doesn't just give advice either.

Oak's Ed Glassmeyer and Stu Greenfield
"Like having another employee on the payroll."

In the past five years, Glassmeyer and Greenfield have forced management changes at about a dozen companies. "If you want venture capitalists to give you money and forget about you, these aren't the guys," advises Shugart.

No wonder. Glassmeyer and Greenfield have backgrounds that give them long memories. Glassmeyer, 41, a Marine officer in Vietnam, passed up an offer from Morgan Stanley after getting a Dartmouth M.B.A. and joined Citicorp Venture Capital. Greenfield, 51, with a degree in clas sics from St. John's College in Annap olis, put in almost 15 years at IBM.

The pair began working together a Donaldson, Lufkin & Jenrette's Sprout Group in 1971. At Oak, Green field is a soft-spoken, scholarly theo rist who specializes in marketing an pricing. Glassmeyer, meanwhile takes on the more people-oriente chores. "He likes classical music. like pop," Glassmeyer explains.

Unlike many venture capitalist however, Oak specializes. Glass meyer and Greenfield try to limi their investments to office automa tion. Seven of Oak's nine profession als have experience in the area, an fortunately for Oak it is growing fas and chockful of opportunities.

Oak's specialization, howeve gives the firm an edge in attractin good deals. Example: When Davi Norman, founder of Dataquest, wan ed to start Businessland, Inc., a chai of stores selling electronic offic equipment, he went straight to Oa General partner Michael Kaufma had helped Xerox organize its reta network, a closely related experienc "His contacts have been extreme helpful," says Norman. "It's like ha ing another employee on t payroll."

Since Oak's partners kno their subject matter cold, course, they also don't have waste time probing every ne gizmo that comes over t transom. "We already und stand the market and the pro ucts," explains Greenfiel "Whether the firm will be winner or marginal all pends on people."

How many times have y heard that before? Still, Oa successes make its evaluati criteria worth understandi Glassmeyer and Greenfi like proven track reco which is why half of Oak's ventures are headed by man ers who have won in the past. Beyo that, the firm leans toward manag who have worked at small busines and steers clear of escapees from c porate bureaucracy.

"Executives in large corporati lose touch with the real world," s Glassmeyer. "They operate at a le removed from front-line succes and failures, and that experience the most important to us." Intel, h ever, is one corporate excepti Glassmeyer says it consistently tu

ıt good entrepreneurs.

Oak's experience also indicates that gree-laden or technology-obsessed anagers are often big risks. "They ve trouble making business deci-ons," says Glassmeyer. "We buy ndamentals, market-driven chief ecutives with a high energy level d a strong ability to communicate. ıey do not have to know much out business planning or finance. ıt we want them to do some things ry well, especially providing leader-ip and direction."

With that kind of thinking one good nture can sometimes produce nu-erous spinoffs. Look at Oak's histo- with Alan Shugart. Greenfield met m while they both worked at IBM in e Sixties and helped Sprout provide nds to Shugart Associates in 1973. The company, which foresaw a change in computer memory from tape to disk, was a huge success. It became the first concern to make floppy disk drives commercially available and was acquired by Xerox in 1977 for $45 million.

Greenfield and Glassmeyer picked up a large fee for arranging that deal and in 1980, when Shugart had another idea, guess who provided the capital. Today, his Seagate Technology, which makes 5¼-inch rigid disk drives for small computers, is the leading producer in what should become a $2 billion market by 1986. Oak's $500,000 investment, now three-quarters sold, has a market value of $10 million. But that's only the beginning. Oak has also invested in three other companies founded or managed by former Shugart employees. All in all, that early relationship has spawned eight more promising deals.

Oak's list of winners, which also includes Data Switch Corp. and Intelligent Systems Corp., is indeed impressive. But Glassmeyer feels he learns just as much from the losers. Diacon Systems Corp., a computer systems company that Oak helped put into liquidation after it sustained a $1.1 million loss, is a prominent example. It got into trouble because of bad management. "Our biggest mistakes are in making judgments about people," concludes Glassmeyer.

Trite? Sure, but such judgments are the most important in any business. It's nice to know they pay off well for the black-box boys, too. ■

The Funds

veryone likes to save on taxes—especially orporate treasurers. That's the secret be-ind one of the mutual fund industry's ottest new products.

"We've been discovered"

By Paul B. Brown

ORPORATE TREASURERS are a lot like the keeper of the family checkbook. Back when interest es were over 17%, they rushed to n accounts in money market ds. Even at a 46% corporate tax e, the aftertax yield was better than . But now that average money mar-rates have fallen to less than 8%—ducing about a 4% aftertax re-n—treasurers, like the rest of us, looking for a better way.

he mutual fund folks, meanwhile, eager to hold their corporate ac-nts. After all, they once made up a y chunk of all money fund assets. never fear: Some cleverly struc-d funds offer short-term corporate estors returns as good as those y used to enjoy.

ow? Consider first the tax laws. When one corporation owns stock in another, the dividend income is 85% tax-exempt. If IBM, for example, buys $1,000 worth of Exxon, which recently sported a 10% yield, it would receive annual dividends of $100. Assuming IBM pays a 46% tax rate, the $15 not covered by the exclusion would be subject to $6.90 in taxes. So the effective tax rate on IBM's investment would be a mere 6.9%.

While IBM has people who can spend all their time looking for high-yield, safe stocks, smaller companies don't. Enter the helpful mutual fund industry. Big management companies like Colonial, Fidelity and Vanguard have tax-managed stock funds for just this market—and demand is brisk. "When we started, in August 1981, there was about $4 million invested," says Sumner Abramson, Colonial senior vice president. "We now have $130 million, with most of that coming in the last four months."

All the new funds work basically the same way. The minimum investment varies, with fees ranging from 0.33% to 2.5%, depending on the fund and the size of the investment. The assets are high-yield, relatively safe equities—utilities and oil companies are popular now. But another IRS quirk makes diversification possible: If at least 75% of a fund's revenues come from corporate dividends, then all income qualifies for the 85% exclusion, regardless of its source.

This gives fund managers an opportunity to show their stuff. "It is incumbent not to get more than 25% in interest, plus short-term gains," says John Neff, managing partner of Wellington Management Co., which invests the money for Vanguard. "You want to get as close to 75% as you can, so we manage that way. Last year we came very, very close."

There are other ways to boost yields, too. Colonial, for example, sells calls on its stock purchases, to hedge against a drop in stock prices. And Fidelity does not take its management fee out of the fund's yield. Instead, investors are billed separately. That charge, of course, is deductible.

Despite the tax benefits, stock prices can tumble and dividends can be cut; so tax-managed stock funds are hardly a sure thing. Right now, however, many funds claim they can offer annualized aftertax yields of perhaps 10%. Not surprisingly, as interest rates on other investments fall, interest in the funds is rising. "We were a well-kept secret," Neff says. "Now, people have discovered us." ■

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Don't watch what the banks are doing with their money market deposits . . . watch what they're not doing.

A $300 BILLION HEADACHE

By Ben Weberman

t the time, Dec. 14, 1982 didn't eem much different from any other ay. But in retrospect, it was histor-. In the four brief months since ıen, banks, savings and loans and ıutual savings associations have ttracted more than $300 billion ıto their new money market de-ɔsit accounts.

This is far more than they know hat to do with. In fact, it amounts a $300 billion headache. But, for ıe smart investor, this problem for ıe bankers can amount to a signifi-ınt opportunity.

"For God's sake, let's not make e same mistake we made a dozen mes before," says John Glenn, se-or vice president of Orlando's Sun ınks. "We can't borrow short and nd or invest long this time." The eer size of these sums, however, eans the bankers are severely nited in their choices.

Here's why. There is no way the nks can put the money to work ickly. In fact, billions of dollars ıst remain parked in short-term ɜtruments. At the same time, the nks must keep the gap between e maturity of their liabilities (that deposits) and assets (invest-ents) as small as possible. Also, ey must keep the spread between e cost of funds and the yields they ng as large as possible.

n Weberman is economics editor of RBES *magazine.*

Quite a dilemma. And as the bankers go about solving it, the smart investor will look at precisely the investments the big boys do not want. That's where the laws of supply and demand will depress prices and increase yields.

Okay, so where are the leftovers? Long-term Treasury securities, for one thing. Only the most daring commercial banks these days will invest in Treasuries with maturities of more than five years. Many bankers will never do so unless they are positive that interest rates are falling. Sun Banks' Glenn, in fact, rarely touches Treasury maturities of longer than two years.

Bank buyers or not, however, the federal government will raise an estimated $200 billion in the 12 months ending Sept. 30, 1983. About $40 billion to $50 billion will mature in five years or longer. That makes longer-term Treasuries something of a drug on the market.

Savings and loan associations, on the other hand, have never been much for holding Treasuries, long term or short term. Mortgages are their bag. They have to put this money somewhere quickly, but they don't want to get locked in.

Take Gibraltar Financial Corp. of California, for example. Gibraltar wants to make adjustable-rate mortgages tied to short-term yields. It will make 30-year fixed-rate loans only if it can resell the debt quickly to the Federal National Mortgage Association or the Federal Home Loan Mortgage Corp. and thus skip market risk. Another California institution, Glendale Federal, ties its mortgage rates to the average on six-month Treasury bills.

Commercial banks like Sun and thrifts like Gibraltar and Glendale Federal are typical. Where they're putting their money is where the bulk of that $300 billion is going. Left out are Treasury and government agency obligations that mature in ten years or longer. Result: Prices are falling and yields rising on these long-term issues.

Of the neglected long-terms, I think Treasuries are the best bargain, since their prices are depressed in two ways: by the caution of the banks and thrifts, and by the heavy federal financing needs. The best of the Treasuries is the 10-year note—it has more upward potential than 30-year Treasury bonds.

In comparison, how do corporate bonds look? Long-term industrials such as Arco 12½s of 2012 are more attractive than intermediate-term issues such as Mobil's 10⅞s of 1992. The Arcos sell at 105, to yield 11.88%, 120 basis points more generous than similar maturity Treasury issues. The Mobil issue, however, is now trading at 99⅛, to yield 11.02%—only 40 basis points better than intermediate Treasuries. The additional yield does not compensate for the lower quality.

The best way to profit from the bankers' dilemma is through GNMA mortgage passthrough certificates. I think the thrifts soon will be flooding billions of dollars into the mortgage market, pulling yields down from the current 12½% or so on 30-year fixed-rate mortgages to less than 10%. Ginnie Mae passthroughs will appreciate substantially as those yields fall.

Here's a list of recent yields on some of these issues:

U.S. Treasury 10-year:	10.60%
U.S. Treasury 30-year:	10.68%
Intermediate industrial:	11.00%
Long-term industrial:	11.80%
GNMA 10% coupon:	11.55%

Remember that this is where bond yields are today. They won't be there by the end of the year if the economy behaves the way I think it will. Both inflation and inflationary expectations will cool. Treasury cash needs will subside. Corporate credit demands, too, won't be oppressively high because cash flow will strengthen. That means the corporate bond calendar will be easily manageable. Fed monetary policy will ease, too, because the growth of money supply will have returned to targeted paths.

Bankers' dilemma . . . investors' opportunity. ■

The benefits of military spending are more obvious as war becomes high-tech. Obvious to whom? The Japanese.

COSMETIC BOOKKEEPING

By Srully Blotnick

Three topics have been very much in the news: the federal budget deficit and the related subject of defense spending; Japanese rearmament; competition between U.S. and Japanese high-tech industries, especially research and development on computers and semiconductors.

Are these three topics related? Intimately, although you would never know it from reading the papers or watching the TV news.

Japanese executives understand the underlying connections here better than their American counterparts presently do. Recently I had dinner with the president of a major Japanese electronics firm. I asked him what would happen if pressure from the U.S. forced Japan to exceed the mere 1% of GNP that the country has devoted to defense spending. He let me know that his country's business leaders have been preparing for that eventuality for a number of years.

"When the time comes that we have to boost our defense budget, we will become more like the U.S," he said with a mischievous smile.

"In what way?" I asked.

"Now our government gives R&D money to commercial firms. With a bigger defense budget, money will still be given to commercial firms, but it will be given *in the name of* defense spending. Isn't that what you do in the U.S.?"

"How clever," I thought. American public (and congressional) opinion will be appeased by the move, since it gives the appearance of lightening the financial burden on the U.S. of providing Japan with a military umbrella. And yet, the real consequence of the increased spending will be an acceleration in the rate at which R&D on high-tech projects in Japan is funded. Things can be done quietly in the name of defense that would be much more conspicuous if done in their own name.

In traveling that route, the Japanese know full well they will be adopting an approach that the U.S. has used for more than a quarter of a century. The Semiconductor Industry Association (SIA) estimates that from 1958 to 1977 the federal government provided $350 million of direct R&D support to the industry and provided another $352 million of R&D funds indirectly, through product purchases. During the same period the semiconductor industry spent $1.7 billion of its own money on R&D.

Therefore, about 30% of all R&D funding during the two decades came from the U.S. government. Today, the U.S. military market is less than 10% of the total U.S. semiconductor market.

If the Department of Defense has its way, a boost in R&D spending will be successful in hastening the development of a technology that it deems essential. It is called the VHSIC—very high speed integrated circuit. You will be encountering these initials again if you are interested in either business or technology. Dr. David Barbe of the Pentagon describes it in these words: "As a technology, VHSIC is a subset of VLSI that emphasizes speed. It is also a program funded by the Department of Defense." If you would like to learn more, take a look at Barbe's excellent new engineering text, one of the few that concentrates on the military segment of the market, *Very Large Scale Integration (VLSI): Fundamentals and Applications* (Springer-Verlag, second edition, $24).

According to Barbe and Ellison Urban (of the Navy Department), this program's goals include: 1) "higher-order computer-aided design (CAD) techniques for efficient design of very complex ICs"; 2) "a JTIDS (joint tactical information distribution system) network intended to connect many different types of weapons systems dispersed over a wide area"; 3) anti-jam modems, "to replace the specialized modems of the past and eliminate costly redesign. The ideal all-purpose modem would stress programmability so that the same circuitry could serve many different types of data modulation schemes."

Finally, "the Navy is considering the use of VHSIC components to produce smaller versions of existing computers. The goal is to develop a 32-bit microprogrammable processor capable of 50 million instructions per second."

You don't have to be a graduate engineer to realize that the commercial spinoff from these and the many other goals of the program will be sizable. As war becomes increasingly high-tech, the business benefits become increasingly apparent. The stakes are enormous. So much so that even if Congress takes an ax to Reagan's defense proposals, business and military planners now hope that most high-tech R&D will remain intact. It used to be said that "What's good for GM is good for the country." But there is growing reason to say that "What's good for the Pentagon is good for the country"—assuming we don't use the new products to kill ourselves at the same appalling rate we die in cars.

In their discomfort about defense spending, Americans usually overlook the commercial spinoff. Now that war is primarily electronic, Japanese businessmen aren't about to make the same mistake. ■

Dr. Srully Blotnick is a research psychologist and author of Getting Rich Your Own Way *and* Winning: The Psychology of Successful Investing.

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Having been "present at the creation" of venture capital, the dean of the industry has some useful advice for the rest of us.

WHAT MAKES TOMMY DAVIS RUN?

By Thomas P. Murphy

The style seems laid-back Californian: relaxed, blue-blazered, "call me Tommy." But 71-year-old Tommy Davis, dean of America's venture capitalists, comes from another place and time: tidewater Virginia, and Harvard, where he majored in English and then finished in the law.

Venture capital, the Silicon Valley he helped create, the millions of dollars he made for himself and others—all come from a notion of his middle years. In the late 1950s Tommy Davis was already a successful corporate lawyer and a vice president of Kern County Land Co. in San Francisco when he became fascinated by stories he heard of new technical developments coming out of Stanford and Berkeley. Then in his late 40s, Davis took some night-school courses in electronics. He traveled and visited factories and convinced himself that: "The fortunes of the past were made by stringing steel rails across the country or digging holes in the ground for minerals or oil. I came to believe that the fortunes of my generation would come out of men's minds."

It was a lofty vision, the kind that can seize English majors in their later years. But Davis managed to do something with it. He talked his employer into an initial venture capital fling. Kern County Land financed, of all things, a fledgling military electronics company, Watkins-Johnson, which, in fact, became a quick success. Successful or not, Kern County Land had had enough of venturing, and Tommy Davis, then 48, teamed up with a bright young man from Wall Street, Arthur Rock, and the two of them set out to raise a venture capital fund.

The whole idea was so new in 1960 that Davis and Rock had to spend most of their time explaining to investors what a venture capital fund was. As soon as they grasped the concept, most investors found it easy to say no. Months of effort raised "a pitiful sum of money," Davis recalls—$3.2 million.

Rock would say later that their only policy was to have no policy, but the partners had pretty well agreed on one thing. It was to stay away from computers, on the theory that little companies shouldn't try to buck IBM.

Before Rock, who was in New York, had even closed on the fund they were raising, Davis was back in California talking to a fellow named Max Palevsky, who wanted to start a computer company. "I know you'll think you have taken an idiot for a partner," Davis telephoned Rock, "but I want you to come back and meet this Palevsky."

Tommy Davis and Arthur Rock hit a home run their first time at bat—for that matter, one of the biggest hits ever in venture capital. Palevsky, financed by some of Davis' and Rock's pitiful sum of money, founded Scientific Data Systems, and eight years later SDS was sold to Xerox for $940 million.

It is a bittersweet memory for Davis. With that hit, along with Teledyne, to name another, the first fund grew from $3.2 million to $75 million in about seven years. But under Xerox management, SDS was a spectacular flop.

"Some people say we sold Xerox a turkey," says Davis. "We didn't sell them a turkey. SDS people knew how to design computers for science and engineering applications. Nobody there knew anything about designing number crunchers for the business market."

Eventually, Rock and Davis went their separate ways: Rock to open his own venture business and Tommy Davis to begin a series of Mayfield funds. He is now on fund number IV. His record speaks for itself:

Mayfield Fund, 1969-77: Capital in, $3.8 million; at liquidation, $5.8 million.

Mayfield II, 1974-81: $7.5 million; $72 million.

Mayfield III and IV, estimated 50% to 60% compound return.

Obviously, making a few more million dollars is not what makes Tommy Davis run anymore and, he says, it never was. Davis, the old English major, sees the world in grander terms: "a new culture o management; fulfillment of bright hardworking young people; restor ing dignity to the average job." Bu there is more, this feeling a ma gets that he has learned somethin after a long and successful life an that somehow he ought to pass hi knowledge along. In Tommy Davis case, it's a complex of ideas tha boils down to two cores: People a the important element in business and big companies are usually inep and, worse, sometimes destructive

Some samples of his ideas:

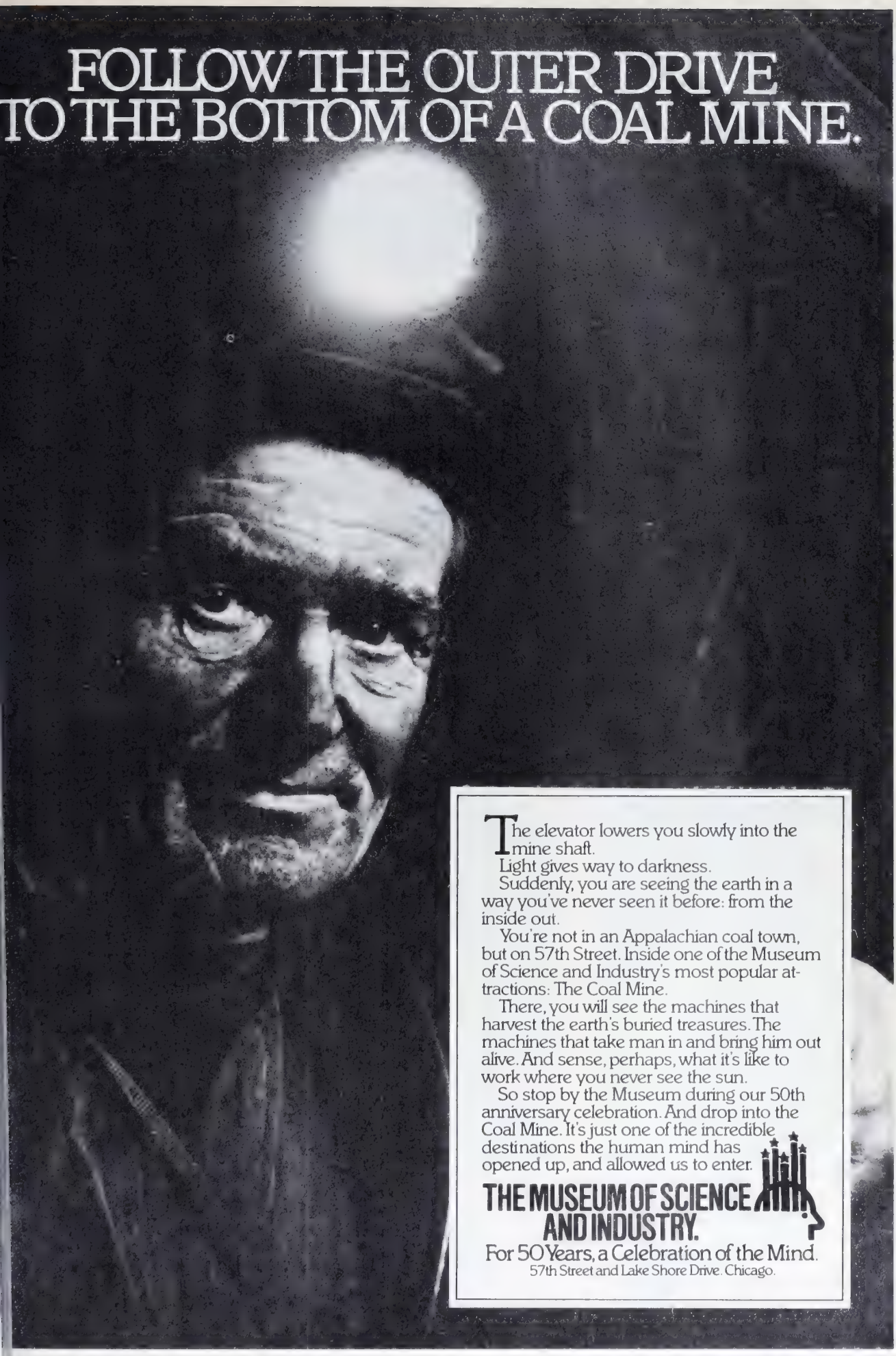
"If I had my way, we would spli companies up, bust them wid open, when sales reach the $20 million level.

"I wouldn't let anyone over 50 b a chief executive. I'd have plenty c people around a company who a over 50, but not as CEOs; energ levels fade.

"Not long ago I heard the pres dent of a big company make speech about launching new pro ucts. He didn't once mention pe ple. 'Who is going to do the work? asked him.

"Venture capital-backed comp nies must have super growth. It is necessity, for it is the only way get and keep the superachievers."

Thomas P. Murphy heads a venture capital firm, Partnership Dankist, Stamford, Conn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Are you ready for the next surge in the stock market?

Some investors are kicking themselves for not putting their money into stocks when the market took off last August. Others are sitting back, still waiting for the temporary pullback that will take place before the biggest stock market surge of all time.

Both groups, meanwhile, are not making any money. Waiting for the right time may mean waiting most of the time.

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Which do you prefer, playing with the odds stacked with you or against you?

PICK YOUR ODDS

By David Dreman

They came out of the gate fast at the beginning of the rally and, by the first turn, had left the rest of the field in the dust. I am speaking of the high-tech stocks that, as a group, have run up over 100% since mid-August—more than double the gain of the Dow and the S&P's. If you were lucky enough to have been in on this thrilling ride, what should you do now? Lighten up fast. Pronto. That's my strong inclination, and I will tell you why.

It's not because the industries aren't exciting. Quite the opposite. They are excellent growth areas. The problem is that everyone knows it, and what everybody knows is already reflected in stock prices. Minicomputers, with the almost exponential development of new uses, may become as indispensable in homes in a few years as electronic calculators are today. Hospital management companies, bringing efficiency and managerial skills to a bureaucracy-riddled industry, have been expanding at better than 25% annually. And then there's genetic engineering, with its possibilities of producing the basic material for everything from low-cost toxic-waste disposal to cures for many serious diseases.

David Dreman is managing director of Dreman, Gray & Embry, Investment Counsel, New York, and author of The New Contrarian Investment Strategy.

Technology is always excitin and this is a particularly stimula ing period. But as I said, it's just secret. Prices of some of the mo spectacular companies are 3, 4 a even 5 times the market multiple

Unfortunately, what this gene tion has to learn all over again that for each IBM, Xerox or Digi Equipment there are large numbe of companies that sound terrific b won't make it. Even if the invest is dead right on an industr growth potential, the chances picking the winning stocks slim. Each era has had to disco that same painful ending for its Take the auto industry of 1920. Y didn't have to be smart to figure that the automobile was in the p cess of changing the world, but y had to be smart—and lucky—to b General Motors instead of Peerl or Franklin or Reo or Graham-Pai In 1920, almost 1,000 auto ma facturers existed; a decade later o a handful remained, most in tr ble. Long term, almost any a stock was a 500-to-1 shot.

The story has been repeated m times since—most recently in idly growing high-tech compa in semiconductors, time-shar and, yes, even hospital man ment. Investors and their advis were totally right about t growth prospects, but that di save people from losing more m ey than they made from them.

With rapidly growing compa too many things can go wron make any of them a sure thi particularly at the prices you today. Markets that appear to h unlimited growth are suddenly undated with competition or s tered by shifts in demand. With glut, which seemed to come o nowhere, the 30% growth proje for the oil-service group less t

ee years ago withered away and did the stock prices. Manage-nt teams, capable of running -growing smaller companies liantly, flounder when sales rise $100 million or $200 million. ents seemingly invulnerable to npetition suddenly are bypassed, he state of the art itself moves so that yesterday's leader is to-'s also-ran. And so it goes. The s of picking the few winners are bably worse than playing a sin-number at roulette.

ll of this brings me back to the trarian game of buying low-P/E cks. Here you aren't gambling h literally thousands of impon-ables—and at odds stacked in fa- of the house—but working with nethod proved by studies over r decades to have shown superior formance time and time again. u may miss the thrill of being the nt-runner at the first turn but l very likely wind up in the mon-at the end.

lthough a low-P/E strategy nds simple, psychologically it's particularly easy to follow. It n't make you the envy of stock rket groupies at cocktail parties. ou talk about it, eyes may glaze r and people regard you as an maginative dullard. Even your dren may be confirmed in their w that you are probably over the . Never mind. You will end up ghing at your detractors as you ll off to the bank.

wo low-P/E situations I like:

roger (40), the nation's second-est and one of the most innova- of the food chains, has shown % and 19.9% rates of earnings dividend growth, respectively, the past five years. The stock es at a P/E of 8 times depressed ings and yields 4.2%.

neral Foods (40) is a major pro-r of packaged foods. Earnings ld be up about 10% this year again in 1984. The stock trades P/E of 9 and yields 6%.

he goal of investing should not ction or instant ego enhance-t but to make good money over . For the investor with pa-e, the low-P/E groups have istently outrun their high-tech nents easily, and unless mar-sychology changes drastically, h is very unlikely, they will nue to do so. ■

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At times like this, it pays to take a Chinese-menu approach to stock selection—one from Column A, one from Column B.

HOW STRONG, HOW LONG?

By Ann C. Brown

No doubt about it, the economic recovery is here with a capital hooray. Like a welcome guest, the resurgence was eagerly awaited and now that it has finally arrived, talk has turned to the length of the stay. A preliminary review of the numbers suggests that this recovery may linger longer than most forecasters expect, although its first year's performance may be less dramatic than many of its predecessors'.

Since the Second World War, the U.S. has had six major recession recoveries, not counting the one presently under way. The average bounce back has lasted 38 months and, since the current recovery started in December or January (depending on which economist you listen to), months and months of good news would appear to lie ahead. More important for investors, the bull market that began last August could run for a couple of years more, if it is to reach the average 30-month duration bull markets have enjoyed in the past.

Because of the slowdown in the long-term growth trend of productivity, the real GNP may rise only 4% or so this year, which is substantially below the median first-year GNP recovery of 7% in the go-grow years of the Fifties, Sixties and early Seventies. There are a lot of reasons for the decline in the nation's productivity, but one of them has to be the transition from a manufacturing to a service society. In any event, this new era of slower GNP growth is likely to bring with it prolonged prosperity.

What also may keep the recovery from an early burn-out are the cross-currents and confusion unique to this particular time. Ignoring politics for the moment, on the one hand, most consumers are up to their purses in purchasing power. On the other hand, the presence of the large number of unemployed should restrain spending and the indiscriminate assumption of new debt by individuals and families, many of whom have only recently paid off their earlier borrowings. And, too, the probable withholding tax on interest and dividends at the source and higher-than-normal real interest rates may cut into consumer spending.

Business should give a boost to the economy by replacing badly depleted inventories, but business capital spending is likely to be a drag on this recovery as a result of the record low capacity utilization rates. After a brush with bankruptcy last year, many companies are in no hurry to do much in the way of building or buying new equipment until they rebalance their balance sheets. The continued overvaluation of the dollar will not help corporate sales, since it makes it pricey for other countries to buy what they want or need from the U.S.

In a peculiar way, the continuing specter of a humongous federal deficit may actually help stretch out the recovery by scaring the Federal Reserve into a safe, sane and sustained policy, once this period of intense monetary hype under the guise of mixed-up Ms has passed. With the possibility of a revival of heavy inflation so much on the minds of the money men, they should be quicker to become less accommodative should the situation warrant it.

Today's stock market is neither bull nor bear but leopard, which is to say "spotty." Anything connected with high technology has a telephone-number sized multiple, whereas rigor mortis has set in on the oil-service group. Automobiles are in. Tractors are out. And, while the financial information companies are getting a big play, the banks act as if all their loans were in Argentina.

At times like this, I find it often pays to take a Chinese-menu approach to stock selection—one from Column A, one from Column B. O the rich dishes in the first column *Syntex* (58) continues to look good in spite of its miseries with th Mexican peso devaluation. Prior t currency losses, Syntex would hav reported sales gains of 20% in th second quarter instead of 8%. Eve so, operating profits managed t climb, which indicates costs are un der control. With new product coming along and with a weakenin in the dollar close at hand, the ou look for the company continue bright. The price of Syntex' stoc has doubled since last year's low bu recently has been building a base f what looks like a breakout on th upside. For the year ending Ju 1983, Syntex could earn $4.30 p share, vs. $3.85 a year ago. For fisc 1984, $5.05 to $5.10 per share lool possible—maybe more.

My candidate from Column B, th laid-back but looking-good line, *Chase Manhattan* (51). This big, mo ey-center bank has a current mul ple of just over 4 times this yea estimated earnings per share of $1 plus and only about 3½ times ne year's earnings, expected to around $14 per share. With Drysd Government Securities and Pe Square fading into unhappy mem ries, the future holds promise Chase—Mexico's and other proble loans notwithstanding.

If you feel especially ventu some, consider one from Column *Warner Communications* (28) is u likely to get too much worse a could get better in a hurry, if $4.50 per share earnings estima for 1984 hold. ■

Ann C. Brown is chief executive officer of the equity advisory and portfolio management firm of A.C. Brown & Associates.

WHAT YOUR RAIN COULD DO IN A VOID MAY SHOCK YOU.

ne removing the sensory tion your brain responds to ay—the sights and smells and that define the reality around hat new realities could your xplore when freed from the nts of the ordinary?

cent issue, OMNI Magazine with Dr. John C. Lilly, the versial neuroscientist eveloped the world's first n tank. According to Lilly, deprivation can induce ological freefalls"—waking out-of-body travel, and even a possible breakdown of the interspecies communication barrier. Indeed, Lilly's research offers striking evidence that such "alternate realities" are very real, and perhaps necessary, components of our future.

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You can thumb your nose at the bears in the stock market if you protect your portfolio with a stock index spread.

BEAR TRAPS

By Stanley W. Angrist

So you have made a bundle since last summer, when nearly every stock you own came to life. But you know that bull markets don't go up without corrections, and you feel that this one might be getting ready to have a pretty good correction. There are a number of strategies you could employ to protect yourself against such an eventuality.

The simplest ploy is to sell out your portfolio, but you hesitate to do that because you still feel the market has a way to go. You could also sell calls, if available, against the stocks you own, but in the event of a rally, you would hate to see your winners called away. You could sell short one of the stock index futures contracts, but the risk of a margin call makes you nervous. Finally, you could buy put or sell call options on one of the stock indexes, but, so far, the open interest and volume make you wary of these thin markets. It seems to me that the most conservative move you could make would be to look for an intermarket bear spread in stock index futures.

A spread that would serve to protect a stock portfolio would be one that has you go long the S&P's index and short the Value Line index. The chart shows how this spread has performed since early October.

Stanley W. Angrist is a commodity speculator, consultant and longtime observer of the commodity markets

The Value Line index, traded at the Kansas City Board of Trade, has moved up more sharply than the S&P's. Therefore, in the event of a selloff, one would expect it to drop faster. Let's see why.

The Value Line Composite Average, on which the stock index future is based, is an equally weighted, geometric average, expressed in index form. It consists of approximately 1,700 stocks, which comprise about 96% of the dollar trading volume in U.S. equity markets. The equal weighting and broad composition of the Value Line index makes it responsive to so-called second-tier stock price movements.

The S&P's 500 index, which trades on the Chicago Mercantile Exchange, is a weighted average. That is, the price of each of the 500 stocks making up the average is multiplied by the number of shares of that issue outstanding. Obviously, large capitalization stocks in this index will have a much bigger effect on the value of the index than will smaller-capitalized issues. Since highly capitalized stocks tend to move sluggishly, the S&P's will be less volatile than the Value Line.

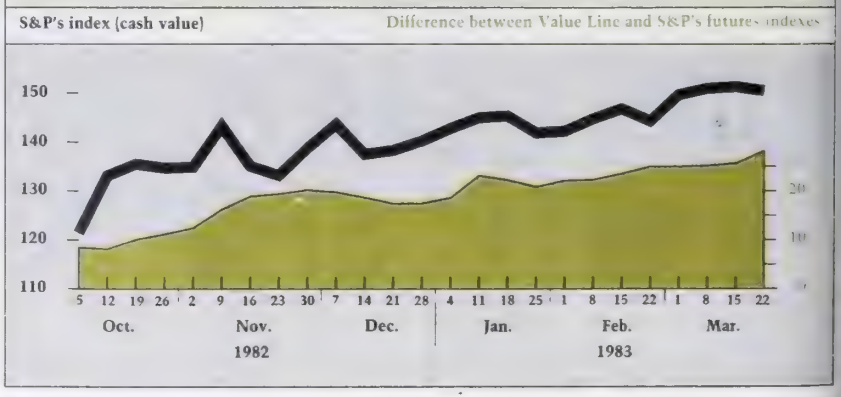
As stock market prices begin to trend, substantial price movements occur, first in the S&P's index, as investors initially buy or sell the large capitalization issues represented heavily in that index. Then investors turn their attention to the second-tier issues that contribute equally in the Value Line index. As the bull continues to roar, these more volatile issues begin to fly. Thus the spread between the Value Line and the S&P's widens.

Just the opposite happens when a correction begins. First, investors, mostly institutions, sell the large capitalization issues. So the spread continues to widen, even as a correction gets under way. As the market consolidation continues and investors become concerned about conserving capital, they start to dump their second-tier issues, and the Value Line index starts to fall faster than the S&P's, causing the spread difference between them to narrow.

I would try to buy the S&P's, while selling the Value Line (basis the June contracts), with the Value Line at least 25 points higher than the S&P's. I would risk no more than 2 points ($1,000 per spread), looking for a 5-point profit ($2,500). The margin on this trade is about $1,200. The round-turn commission should be around $100. ■

For bears only

The eight-month-old bull market, as traced by the cash value of the S&P's 500 index, has experienced no major corrections. Over the same period, the spread between the S&P's 500 index and the June futures contracts for the Value Line index has widened. In the event of a stock market sell-off, this difference will narrow and bear spreaders will profit.



/e are hearing the familiar cry: Buy ow, before prices go up again. From here I sit, my advice would be, cool it.

MISREADING THE MONEY SUPPLY

By A. Gary Shilling

the slowdown in inflation for l? Or is it just a cyclical down- n caused by the recession? In ort, will prices start rising again en the economy does?

People who expect inflation to rt roaring back soon may feel npted to buy a new house; to sell nds and invest in precious met- ; to stockpile land sites against ssible future plant expansion; to rrow now, long term, before rates ad back to the stratosphere.

My advice to these people is: n't do it.

Those who think we are in for re inflation cite the recent mon- supply growth, which exploded a 24% annual rate in February. ese numbers have scared the d market into a relapse. In my nion, this is all wet. Contrary to ular opinion, the Federal Re- ve hasn't thrown in the towel. It responded to a basic shift in erican political and economic king. Voters manifested their ire to end inflation at nearly any t in the 1980 election and again not really throwing out the Re- licans in 1982. While the gov- ment hasn't managed to cap nding or huge federal deficits, the Fed has acted forcefully. Convinced that people's number-one concern was inflation, it imposed severe monetary restraints, letting up only moderately last summer, and then with caveats against renewed inflation. In fact, the Fed may be easing up too cautiously, despite the recent growth in M1.

The growth in the money supply has little to do with the potential supply of credit and a lot to do with people's fear of risk. Swinging is out. Conservative is in. The bankruptcies and rumors of bankruptcies have made people cautious. They are letting cash balances build up. This is reflected by an increase in M1. In short, the velocity of money has slowed. This is not inflationary. It is deflationary. The pessimists are simply reading the numbers wrong.

For these and other reasons, I believe that the postwar string of typical cycles has been broken this time, and an extended period of disinflation has begun. In this issue I am explaining why. In coming weeks I will tell you what you can do about it in terms of your investment and business strategies.

What other deflationary forces indicate a distinct departure from earlier postwar experience?

First, real interest rates—the difference between interest rates and inflation rates—remain more than twice their postwar norm. Investors continue to be wary of inflation and seem to want to recoup their pound of flesh after the negative real interest rates and extreme losses they suffered earlier.

Deregulation, by increasing competition and driving prices down, acts as a deflationary force. We have seen its effects on airlines and trucking and, more recently, on telecommunications and financial services. Steel and autos, once cartel-like industries, also are feeling the effects of intense foreign competition.

The strong dollar is another deflationary factor that seems likely to continue, as the U.S. remains a safe haven for foreign investors. Naturally, the strong dollar encourages imports. They, in turn, tend to hold down domestic prices and intensify competition with domestically produced goods. The strong dollar also turns exporters back to the U.S. market.

Inflation is also inhibited by the continuing risk of financial disasters around the globe. Earlier, when real interest rates were negative and tangible asset prices were rising, everyone was borrowing to the hilt and buying coins, antiques, real estate and other collectibles. Companies bought assets in the ground and pension funds poured money into commercial real estate. Whole countries participated. Mexico, for example, bet that oil prices would rise forever and make it easy to pay off international loans. How wrong they all were. When real interest rates went up, tangible asset prices declined, and oil prices fell. And the threat of international financial crisis is far from over.

Business executives are cutting costs ruthlessly and consumers are saving like crazy, quelling inflation even more visibly. Managers are not only postponing but also are canceling capital spending projects. Cost cutting, while necessary, almost inevitably means unemployment or lower income for someone. As noted, consumers are just plain scared of losing their jobs. Determined, too, to replace what they lost as their tangible assets declined, they are attracted by high interest rate returns. And they no longer need to hedge buy.

A final restraint on inflation comes where you would least expect it—the huge federal, state and local deficits. Though stimulative in a sense, these deficits are also constraining liberal politicians' zeal to enact antirecessionary programs that only increase deficits more uncontrollably.

These deflationary forces suggest that this is anything but a typical postwar environment. Inflation is way down and the overall trend remains downward. ■

ary Shilling, a guest columnist, is presi- of A. Gary Shilling & Co., Inc., a New economic consulting firm. He is author Inflation Ending? Are You Ready?, *just ished by McGraw-Hill.*

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Inflation is dropping, but the politicians who are busily taking the credit for the drop had nothing to do with it.

THE EYE OF THE STORM

By Ashby Bladen

Sanity can be a great handicap in Wall Street. For several months the leading indicators have been rising and consumer prices falling. So bond and stock prices have been going straight up, presumably reflecting a belief that disinflation has set in and prosperity is returning. According to the *Wall Street Journal*, President Reagan hailed February's 0.2% decline in the Consumer Price Index as proving "we are putting inflation back in its cage."

In fact, "we" had nothing to do with it. To the contrary, both fiscal policy and monetary policy in this country are highly inflationary. At the moment, however, the price consequences are being offset by unemployment and the slack demand that the severe recession has caused and by the imported oil deflation. Before we get into the difficult question of how long this happy balance of opposing forces can be expected to continue, here are the facts as I see them.

On the fiscal front, the government, by running a deficit of 6% of GNP, is presently creating purchasing power at least 6% faster than our economy is creating real goods and services. However, the issue that the politicians are arguing about is not whether we should be spending 6% more than we are producing bu whether we should be spending it o armaments or on transfer payment Meanwhile, sensible people, lik Martin Feldstein, keep reminding u that this isn't just Keynesian contra cyclical deficit spending. Even wit economic recovery, the excess spending over producing will widening for the foreseeable futur Since nobody doubts the inflatio ary consequences of large and pe manent deficits, we tend to swe that issue under the rug.

There is an interesting theoretic debate going on about the signi cance of the rapid expansion in th money supply. But nobody ca doubt the significance of the acce erating growth of total Federal R serve credit, which was rising at less-than-10% annual rate last ye and now is rising at an annual ra of more than 20%. It is creating t banking reserves that will suppo an explosion of purchasing power the private sector whenever peop choose to step up their borrowi In every recession Fed policy tur excessively stimulative sooner later, and for 20 years the laggi consequences have been a new pe of inflation and interest rates duri the ensuing recovery.

Twice during the 1970s the l insurance company whose inve ments I was then managing b rowed from the banks during cre crunches. We used the money buy long-term bonds at new pe in yields when it became clear t the crunch was about to caus recession that presumably would accompanied by lower interest ra and, consequently, higher bo prices. But as the recession drag on and the bond market rallie had to point out to the board t bull bond markets were possi

Ashby Bladen is senior vice president for investments of the Phoenix Mutual Life Insurance Co. and author of How to Cope with the Developing Financial Crisis.

so long as the economy re-
ned depressed. Once recovery
n, the inflationary kindling
had been piled up by excessive-
timulative fiscal and monetary
cy would be ignited. Will it be
different this time?

ertainly the details will be dif-
nt. During the 1970s neither
nomists nor bankers believed
there were any limits to the
unt of credit that could be cre-
, and ambitious bankers were
r to lend to virtually all comers.
ay economists still do not rec-
ze any theoretical limits to the
nsion of credit, but practical
ple do recognize that many peo-
businesses and countries have
up larger debts than they can
ly carry on the strength of their
ed incomes.

t this point the natural tenden-
f lenders is to cease extending
credit to marginal borrowers
ask them to start paying down
r old loans. But opposing the
ral tendency of lenders to pull
heir horns is the equally natural
lency of politicians to preserve
r jobs by using the national
it to bail out the overextended
owers whose forced selling
ld otherwise cause deflation
hard times.

he burden of debts has now be-
e excessive both within the
and worldwide. If the bailout
cy were to succeed, it would
n soaring inflation and interest
s. It will not succeed in the end
use there is no international
reignty that can force the world
ccept its notes. Meantime, the
ion between the deflationary
sure of excessive debts and the
tionary pressure of the political
nct will be bearable only so
as the economy remains rela-
y depressed. When it recovers,
wind will start to blow again.

st October in this space I said
the deflationary pressures had
ne strong enough to suggest
we had seen the secular low
s for *best*-quality bonds, but the
sh camp was the prudent one
respect to low-quality bonds
common stocks. That advice
obviously premature, but six
hs later and more than 100
points higher, I certainly see
ason to change it now. ■

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Index of companies covered in news stories and by the columnists in this issue.

American Broadcasting ... 16
American Diagnostics ... 44
AMP ... 42
Amsted Inds ... 183
Anheuser-Busch ... 62
Atlantic Richfield ... 84, 197
Avions Marcel Dassault (France) ... 43
Avis ... 166
Axia ... 41
Baldwin-United ... 6, 40
Bendix ... 40
Brooks, Hamburger, Satnick ... 44
Cali Trading Intl ... 38
Canadair (Canada) ... 43
Capital Cities Media ... 22
CBS ... 16
Cessna ... 43
Chase Manhattan ... 204
Chrysler ... 99
Citicorp ... 194
Cofreth S.A. (France) ... 156
Colonial Management Assocs ... 195
Connecticut General Life Insurance ... 194
Control Data ... 76
Crown Zellerbach ... 134
Cytoscan ... 44
Data General ... 41
Data Switch ... 195
Datsun (Japan) ... 104
Del Labs ... 18
Diacon Systems ... 195
Digital Equipment ... 111
Drexel Burnham Lambert ... 39
Dunham ... 109
Emerson Electric ... 131
Exxon ... 84
Fairchild Publications ... 22
Fidelity Group ... 171, 195
First Jersey Securities ... 6
Flowers Inds ... 60
Ford Motor ... 98, 111
Fox & Co ... 6, 38
Frontier Airlines ... 48
Gates Learjet ... 43
General Electric (U.K.) ... 29
General Foods ... 62, 203
Gibraltar Financial ... 197
Glendale Federal Savings and Loan ... 197
GM ... 98, 111
GNMA ... 197
Goodyear Tire & Rubber ... 109
Grand Union ... 134
Gulfstream Aerospace ... 43
Harris ... 96
Hertz ... 166
Hewlett-Packard ... 42
Honda (Japan) ... 8, 131
Honeywell ... 76, 156
Houston Inds ... 188
IBM ... 96
Intel ... 42
Intelligent Systems ... 195
International Paper ... 84
Johnson Controls ... 156
King Kullen ... 134
Kroger ... 203
Lehman Brothers Kuhn Loeb ... 38
Madison Fund ... 48
Martin Marietta ... 42
Mayfield Funds ... 200
Mead ... 134
Mediatex Communications ... 80
Mesa Petroleum ... 41
Microelectronics and Computer Technology ... 76
Mid-Res ... 154
Mobil ... 197
Molecular Systems ... 44
Monsanto ... 84
Motorola ... 76
National Car Rental ... 166
National Computer Systems ... 111
NCR ... 76
Newcor ... 111
Northwest Inds ... 48
Oak Partners ... 194
Octameron Press ... 166
Odyssey Partners ... 48
Off the Wall Street Journal II ... 176
O.P.M. Leasing ... 38
Oppenheimer & Co ... 48
People Express ... 170
Philip Morris ... 10
Philips N.V. (Netherlands) ... 1
Piedmont Aviation ...
Psych Systems ... 1
Pulte Home ... 1
Quickprint ... 1
RCA ... 16,
Reading ...
Revlon ...
Rich Products ... 1
Rockwell Intl ...
Royal Dutch/Shell (U.K.) ... 1
Safeway Stores ... 1
Sage Assocs ...
Saxon Inds ... 6,
Scallop Thermal Mgmt ... 1
Scott Paper ...
Seagate Technology ... 1
Sears, Roebuck ... 1
Shearson/American Express ...
Shopwell ... 1
Sony (Japan) ... 1
Sperry ...
Stride Rite ... 1
Sun Banks ... 1
Super Food Services ...
Superior Oil ...
Syntex ... 2
Techniclone ...
Telxon ... 1
Textron ... 1
Timberland ... 1
Time Inc ...
Toro ... 1
Toyota (Japan) ... 1
Tracks West ... 1
Trans World ...
Union Oil of Calif. ...
United Technologies ...
Vanguard Funds ... 1
Varian Assocs ...
Volkswagen (W. Germany) ... 1
Wall Street Journal ... 1
Walt Disney Productions ... 1
Wang Labs ...
Warner Communications ... 2
Warner-Lambert ...

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Flashbacks

Edited by Dero A. Saunders

"The more things change. . . ."
tems from past issues of FORBES

xty years ago in FORBES

m the issue of April 28, 1923)

s wealth increases and becomes re widely distributed—a process ng on rapidly—the greater be- nes the number of individuals and ilies who can and do afford the asure and luxury of 'wintering' in ny climes. A taste of such cli- tes very often leads to families of ans moving to them for permanent dence on retiring from active busi- s or agricultural life. California Florida, for example, are adding rmously to their year-round popu- on through this kind of inflow."

cretary of Commerce Hoover be- es that the country's business m is on a sound foundation and t there is good reason to expect a g continuance of prosperity. 'The iness condition is marked just v by the fact that goods are not umulating,' the Secretary said. 'Al- ugh production is at a high point, sumption is equaling it.' "

more abnormal expansion be- es, the shorter the period it will last."

ty years ago

1, 1933)

ots, boycotts, blacklists, block- —once more dairy farmers are heathing these weapons against milk prices. . . . In March dairy ers surrounded York, Penna., led milk consigned to dealers who sed to raise prices and chalked up

Striking dairy farmers salute passage of a New York State law fixing milk prices

one of their infrequent victories. In April striking dairy farmers near Rochester, N.Y. started a series of milk wars but called a halt when the New York legislature hurriedly passed a bill to fix the price of milk."

"The biggest guns of the battleship 'New Deal' have been turned on international problems. The first shot—President Roosevelt's historic order [April 20, 1933] placing an embargo on gold exports—was truly one heard 'round the world. When the smoke cleared away it was discovered that the dollar, allowed to 'take care of itself' in the foreign exchange markets, had dropped 15% in value in relation to the pound sterling, domestic commodity and stock prices had soared while government bonds and other prime investments declined and, perhaps most important of all, our competitive position in world markets had been improved considerably. All this took place while Ramsay MacDonald, premier of Great Britain, and Edouard Herriot, former premier of France, were en route to this country at the special invitation of President Roosevelt to discuss world economic problems."

"Even after three years of depression there is no definite evidence that the American public wants economy in an automobile badly enough to be willing to give up maximum performance characteristics to get it. At least no manufacturer so far has been willing to stake his all on an economy appeal. Every time economy appeal has been emphasized in the past, the manufacturer has felt it necessary to claim as well all the performance, comfort and power of competitive models. The result usually has been a backtrack to larger size, slightly less economy, slightly increased luxury, etc., even when emphasis had been laid strongly on economy factors in a new model."

"Eastman Kodak stockholders, at their annual meeting, selected the accountants they desired to audit the company's records. This practice, common in Britain, promises to be widely adopted here. Various managements are learning that the real owners, the shareholders, are now taking a keen, not to say critical, interest in the conduct of affairs. . . . Leaders in the accountancy profession should bestir themselves to encourage this salutary movement."

Twenty-five years ago

(May 1, 1958)

"As chairman and president of Colgate-Palmolive Co., Edward H. Little, 77, lives in two very different worlds. Only one, Colgate's fast-growing and richly profitable empire overseas, is entirely of his own making. . . .

"Until 1926, when Little got the assignment to build up the company's less than $20 million in foreign [business], overseas sales were only minor appendages. Little had the imagination to see that foreign markets were a richly promising field and to sense that they could not be handled as a mere afterthought. Spending eight months of each year abroad, Little brought in native executives, completely reversed the prevailing idea that what was good strategy in U.S. markets was sure-fire abroad. Applying what has been canonized as 'Little's law,' he scrapped the near-universal practice of simply translating U.S. advertising copy into foreign languages, insisted that all promotion be tailored to the native mores and idiom."

"Railroad riders are a fast-disappearing race, Interstate Commerce Commission statistics show. In 1947, for example, 329.1 million coach tickets were sold; by last year, only 154 million. Because of fare boosts, rail-line revenue from passenger-coach traffic dropped less precipitously, last year totaled $430.3 million vs. $559.6 million in 1947. But parlor-car travel plummeted in both traffic and revenues, from 30.6 million and $336 million in 1947 to 13.3 million and $191 million ten years later."

Thoughts
on the Business of Life

We should concentrate on doing with all our might and mind the thing that lies immediately to hand, doing our best hour by hour, day by day, fretting as little as possible about what the future may hold or indulging too much in vain regrets over the past.
B.C. Forbes

The one thing that hurts more than paying an income tax is not having to pay an income tax.
Thomas R. Dewar

A day of worry is more exhausting than a day of work.
John Lubbock

True success is overcoming the fear of being unsuccessful.
Paul Sweeney

Worry never robs tomorrow of its sorrow, but only saps today of its strength.
A.J. Cronin

No man ever sank under the burdens of the day. It is when tomorrow's burdens are added to the burdens of today that the weight of them is more than a man can bear.
George MacDonald

A Text . . .

I have been young, and now am old; yet have I not seen the righteous forsaken, nor his seed begging bread.
Psalm 37:25

Sent in by J.N. Holt, Cherokee, Kan. What's your favorite text? *The Forbes Scrapbook of Thoughts on the Business of Life* is presented to senders of texts used.

The man who has done less than his best has done nothing.
Charles M. Schwab

The past always looks better than it was. It is only pleasant because it isn't here.
Finley Peter Dunne

Do not plan for ventures before finishing what is at hand.
Euripides

Never mind your happiness; do your duty.
Will Durant

One need not hope in order to act; or succeed in order to persevere.
William of Orange

Diligent ants undermine the moat.
Japanese Proverb

Were I to await perfection, my book would never be finished.
Tai T'ung

Just be glad you're not getting all the government you're paying for.
Will Rogers

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An income tax form is like a laundry list—either way you lose your shirt.
Fred Allen

You can achieve more by patience than with talent.
Frank Tyger

A great part of this life consists in contemplating what we cannot cure.
Robert Louis Stevenson

To think we are able is almost to be so; to determine upon attainment is frequently attainment itself.
Samuel Smiles

Why wish for the privilege of living your past life again? You begin a new one every morning.
Robert Quillen

When one door closes, another opens; but we often look so long and so regretfully upon the closed door that we do not see the one which has opened for us.
Alexander Graham Bell

You can never ride on the wave that went out yesterday.
John Wanamaker

The end knows its beginning no better than the beginning knows its end.
James Thorpe

"Again" should equal a gain.
Shraga Silverstein

I like a person who knows his own mind and sticks to it; who sees at once what, in given circumstances, is to be done and then does it.
William Hazlitt

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May 9, 1983

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Volume 131,
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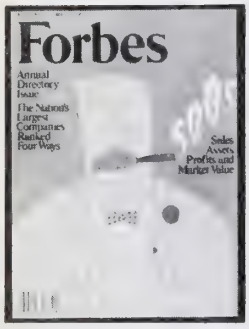
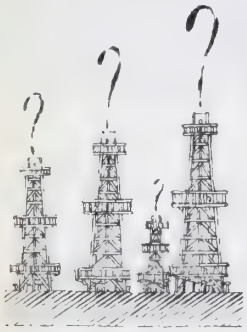


223 The Forbes 500s: A difficult year in three of four ways. But the fourth foreshadows better times.



55 Oil futures: Where once it set prices, OPEC now ratifies the market.

71 It was a humbling experience, but a most valuable one as well

The Forbes 500s

223 Introduction
224 The Forbes Sales 500
232 The Forbes Profits 500
247 The Forbes Assets 500
256 The Forbes Market Value 500
266 Company Rosters
307 Jobs And Productivity

55 Oil:
A Signal To The World
Trading in crude oil futures is more than merely one more game for speculators to play. More likely, it announces the end of OPEC's domination of the world oil market.

57 The IMF:
Is There Another Answer?
There is, but it's too frightening for the bankers and politicians to talk about.

60 Insurance:
Where Stand The SPDAs?
State insurance regulation is as varied as the 50 states. Where does that leave Baldwin-United annuity holders?

61 Companies:
Texaco
"I don't want department stores," says John McKinley. "I don't want copper mines. I want to drill more of those big oil tracts."

70 Investments:
The Trendy Stuff
In mutual funds, unfortunately, that's what seems to be hot.

71 Companies:
Lucky Stores Inc.
Everybody makes mistakes. Learning from them is the trick.

74 Lingerie:
Selling Sexiness
And these days, it's really selling.

80 Government:
Public Television
Take all that moaning about federal cutbacks with a grain of salt. PBS is doing all right.

82 Companies:
Pacific Telecom Inc.
Whoever called utility managers sleepy never met Al Gleason.

87 Banks:
The Latest Cottage Industry
In the shadow of the financial conglomerates, independent banks are sprouting like weeds in Texas and California.

99 The Streetwalker:
Getty's Problem
And Fayez Sarofim's solution. Also: *Financial World*'s silent partner; a friend for Warner Communications; the right timing on Prime Computer.

100 Companies:
The Rouse Co.
As Disney sells fantasy, Rouse sells themes. And the themes sell the goods.

106 Companies:
Communications Satellite Corp.
Why is Joseph Charyk committing Comsat to costly diversification? Because the handwriting may just be on the wall.

110 Companies:
Orion Satellite Corp.
Government lawyers who become entrepreneurs are a rare breed. Even rarer is one with a truly audacious idea.

112 Companies:
Gould Inc.
Not many companies would part with a division that's just come up with a promising new product. But not many companies are run by CEOs with the fierce drive of Bill Ylvisaker.

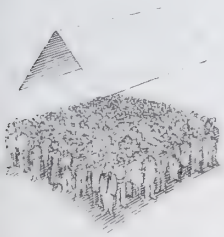
115 Taxing Matters:
Right Hand, Left Hand
Just when the IRS is cracking down on tax shelters, Uncle Sam is encouraging one of the biggest of all.

116 Numbers Game:
Bankers' Rights
This may come as a surprise, but most of the 15,000 banks in the U.S. never have a full audit from a certified public accountant.

118 Europe:
A Touch Of Capitalism
Two of Europe's hottest new issue markets are in socialist Sweden and France.

122 The Up & Comers:
W. L. Gore & Associates
Its "lattice" organization is as impressive as its successful product. Also: Thomas Nelson Inc.; Vermont Research Corp.

106 *Comsat: What's happening to the hottest stock of 1964?*



115 *Taxing Matters: Uncle Sam doesn't let the left hand know what the right hand is doing.*

122 *The Up & Comers: No bosses, no titles, no employees—only "associates."*

196 *Database Publishing: "There is a trap here."*

165 Technology:
"We're Selling Ice To Eskimos"
Well, not exactly. But Micro Focus, Inc., does the next best thing—it sells high technology to the Japanese. Also: New Brunswick Scientific; what comes after the floppy disk?

176 On The Docket:
Comparative Advertising
A court case that could have some strong implications for the current vogue of knocking your competitor by name.

Faces Behind The Figures

179 W. Graham Claytor Jr.,
Amtrak
179 James Skidmore Jr.,
Science Management Corp.
180 Terry Ehrich,
Hemmings Motor News
180 George Weissman,
Philip Morris
182 Paul Klein,
Playboy Channel
183 Alvin Lubetkin,
Abercrombie & Fitch

185 Personal Affairs:
Handwriting Analysis
Long used in the personnel departments of European companies, graphology has been classed with astrology and the occult in this country—until recently. Now hundreds of U.S. companies are using it.

196 Publishing:
The Database Boom
It's a fast-growing field that sounds great but could be a trap for the unwary entrepreneur.

328 Investments:
Pioneer
Boston-based Pioneer Group's fundamentalist approach has brought it some above-average returns. But few of its holdings match the stock performances of its own management company.

Money And Investments

49
What's Ahead For Business
50
The Forbes Index
323
The Forbes/Wilshire 5000 Review

Columnists

333
Ben Weberman
334
Srully Blotnick
336
Thomas P. Murphy
338
Ann C. Brown
340
Stanley W. Angrist
342
Ashby Bladen
344
Stephen E. Roulac
346
A. Gary Shilling

Departments

6
Side Lines
10
Trends
21
Follow-Through
28
Readers Say
41
Fact and Comment
44
Other Comments
47
Fact and Comment II
351
Flashbacks
352
Thoughts

Photos:
12, Peter Arnold; 14, Historic New Orleans Collection; 21, Terry Parke/Liaison; 42 top, Wide World Photos; 42 center, Walt Disney Productions 1982; 42 center left, Jan Staller; 62, Armen Kachaturian; 70, 180, Steve Liss/Liaison; 71, John McDermott; 74, 79, Christopher Cassler/Camera 5; 84, Doug Wilson/Black Star; 100, A.B. Polatty; 102, 110, 122, 179 top, Eric Poggenpohl; 106, Jim Pickerell; 112, Wm. Franklin McMahon; 120, Laurent Maars/Liaison; 126, Ben Weaver/Camera 5; 130, 192, Michael Abramson; 169, Yuji Tomono; 179 bottom, 182, Bill Kelly; 183, Shelly Katz; 186, Theo Westenberger/Liaison; 196, Richard Wood; 328, Joyce Ravid; 331 top, Frank Fournier/Contact; 331 center, Alex Webb/Magnum

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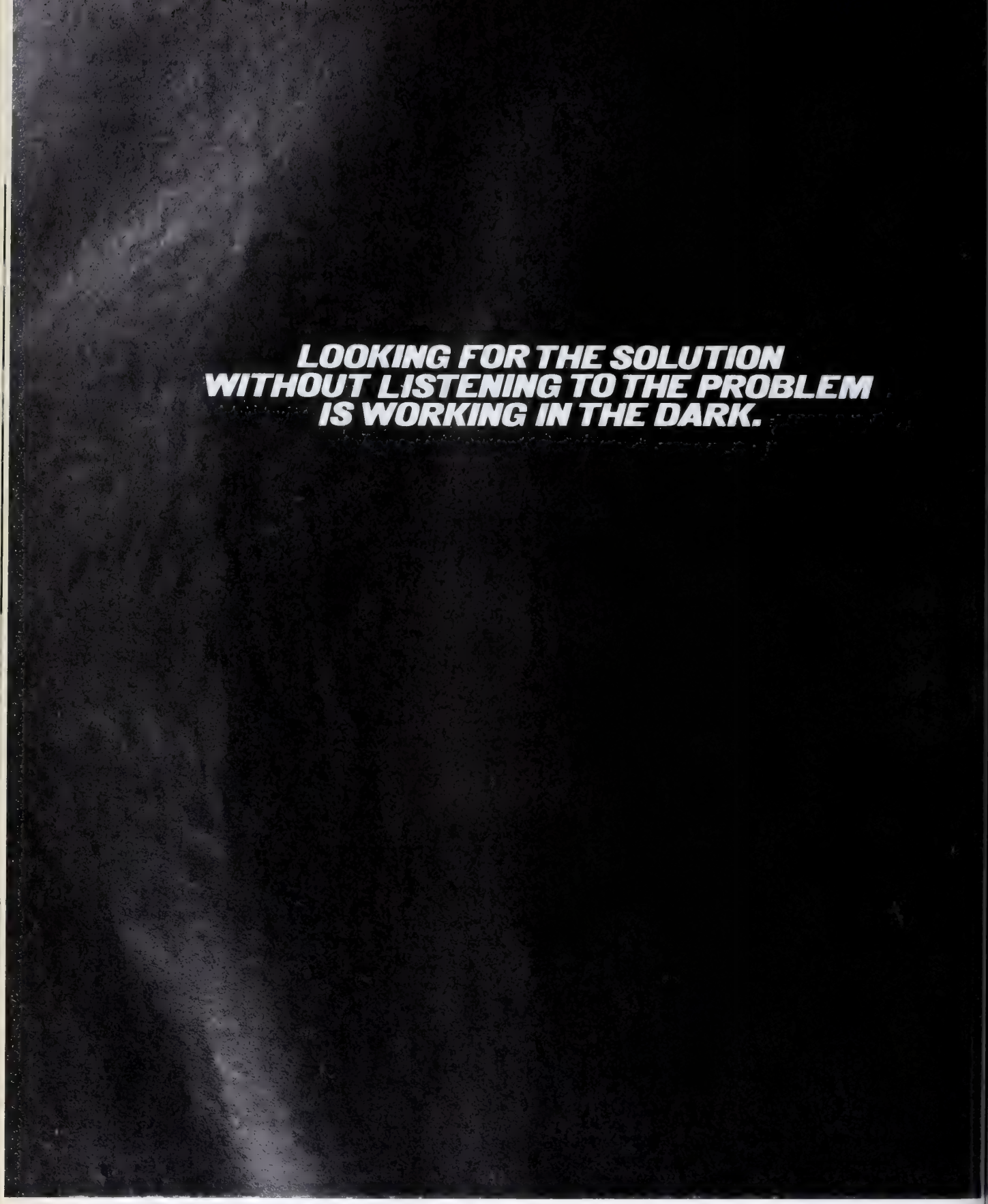

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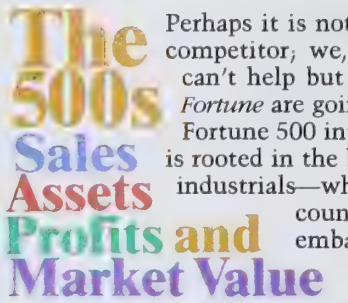

Perhaps it is not polite to laugh at the squirming of a competitor; we, too, make mistakes. Nevertheless, I can't help but smile at the contortions the folks at *Fortune* are going through in their efforts to bring the Fortune 500 into the Information Age. Their problem is rooted in the basic conception. It is the Fortune 500 industrials—which assumes the only companies that count are those that run assembly lines. It's embarrassing for *Fortune* that its list of the supposedly most important companies doesn't include AT&T, Bank of America and many other giants. Especially embarrassing in an age when the line between services and manufacturing is fast breaking down. In the corporate world there are no longer apples and oranges; there are only orange-apples, and the blending is going to progress as the nation plunges into the Age of Information and Services. Isn't IBM largely a service company? And why count Procter & Gamble as a manufacturer while Sears, Roebuck is not? Marketing, after all, is the name of both their games. *Fortune* lists Warner as an industrial but not CBS; GE but not GTE. Union Pacific, a railroad with oil, is on its list; Santa Fe Industries, a railroad with oil, is not. These distinctions are lost on me. (How many services can dance on the head of a pin?)

To get itself out of this dilemma, *Fortune* will next issue bring you yet another list: the 500 largest service companies. Come on, fellows. Fess up. You're on the wrong track. Why not do as we do and list the 500 largest companies—period? Then classify them as we do—not by revenues alone—but by the four measures that really count: profits, market value, assets—and revenues. Until *Fortune* does so, it is only going to get more and more tangled in its own contradiction.

Silver linings

As you would expect, many of the figures for The Forbes 500s make distressing reading this year. But there are significant bright spots, most notably in The Forbes Market Value 500. Total market value of the 500 biggest by this measure increased $150 billion last year to cross the $1 trillion mark. Battle for first place seesawed between IBM and AT&T. Last year AT&T on top; this year IBM. The preeminence of IBM and AT&T is symbolic: Communications and data processing, increasingly intermingled, have outpaced the older industries.

For more good news, turn to The Forbes Profits 500. As expected, total profits are down from 1981, off by 9%, to $112.5 billion. But study the cash flow column. Nourished by Reagan's tax reform, corporate cash flow actually grew during the recession: up $2 billion, to almost $250 billion. A small gain, but the trend is what counts, boding well for a restoration of liquidity and, later, to a pickup in capital spending.

Thanks, Dow Jones

By the way, Dow Jones, publisher of the *Wall Street Journal*, has chosen The Forbes 500s, not the Fortune 500, for its authoritative database services, Dow Jones News/Retrieval. If you want to know more about database publishing and why it is so important, read Jeff Blyskal's "Technology for technology's sake?" which starts on page 196.

James W. Michaels
Editor

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Trends

Now, Chinese M.B.A.s

The Chinese are embracing capitalism with a vengeance. They now have a graduate program in business administration. Last month the first 26 Chinese M.B.A.s since Mao Tse-tung's Cultural Revolution completed an 18-month course at the Shanghai Institute of Mechanical Engineering, with the help of Indiana University. Hoosier business professor Joseph Battat designed and helped run the program. Battat was the first technical expert hired by China's Foreign Experts Bureau since the Soviets checked out in the late 1950s. The M.B.A. program was typically American, with courses in marketing, finance, management, production and computers and information systems, Battat says. Four women and 22 men were taught—in English—by visiting Canadian and U.S. business professors and a management consultant. All the students had previous university training, and two-thirds had worked in factories and shops or on farms. The Chinese are interested in management and engineering, Battat says, and in five years or so could be running the M.B.A. program themselves. "We have taught the teachers," he says. "We taught them a new way of thinking—to analyze—and that could be revolutionary."

Quiz kids

Intelligence tests for children have always been a touchy subject, especially in these changing times. The Wechsler Intelligence Scale for Children, for example, was originally developed in 1939; Stanford-Binet's less popular test dates back to 1916. Both I.Q. quizzes have been revised, but Alan Kaufman, Ph.D., a professor at San Diego's California School of Professional Psychology, claims they are still inadequate because blacks and Hispanics are at a disadvantage. Whites generally score about 102 on the Wechsler I.Q.s, he says, blacks only about 86. (California's courts have ruled the old tests cannot be used to place minority children in classes.) So Kaufman and his wife, school psychologist Nadeen Kaufman, spent five years developing a new exam. Published by the American Guidance Service, the individually administered K-ABC test "redefines intelligence," its authors say. Kaufman says it scores intelligence only by problem-solving abilities, not by acquired knowledge ("achievement"). Children must, for example, pick a familiar face out of a crowd. The K-ABC test narrows racial and ethnic margins: Whites score an average 102, blacks 95 and Hispanics 99.

Rocky Mountain high

For a couple of years or so, Peter Bordeaux, president of New Orleans' Sazerac Co., has been peddling a mint-flavored blue drink called Aspen Glacial Liqueur, an addition to his basic line of Sazerac drinks. Bordeaux was aiming for the upscale market. Aspen

Logo for a new liqueur
Upscale, downscale, who cares?

was to be "chic, trendy," he says. Bordeaux rates his new concoction a success (more than 120,000 bottles sold, 60% in the last four months), but hardly as he planned. The customers are far from upscale. Aspen is selling briskly in such non-U centers as Shreveport, La., Orlando, Fla., Peoria, Ill., northern New Jersey, Providence, R.I. and other strongholds of the blue collar. In fact, some drinkers are ordering "Blue Collars," a blend of Aspen and cream. In Peoria the drink is known as "Ty•D•bol," after the toilet cleaner. Besides the blue-collar set, Aspen aficionados include punk rockers, leather bikers and other nonconformists. Bordeaux still talks wistfully of his upscale potential, but he should have expected some of this all along: One recipe in the Aspen promotional brochure is something called a "Blue Shooter"—"your favorite icy cold brew and a shot of Aspen on the side." That spells "boilermaker" to any blue-collar drinker.

Shopping-cart banking

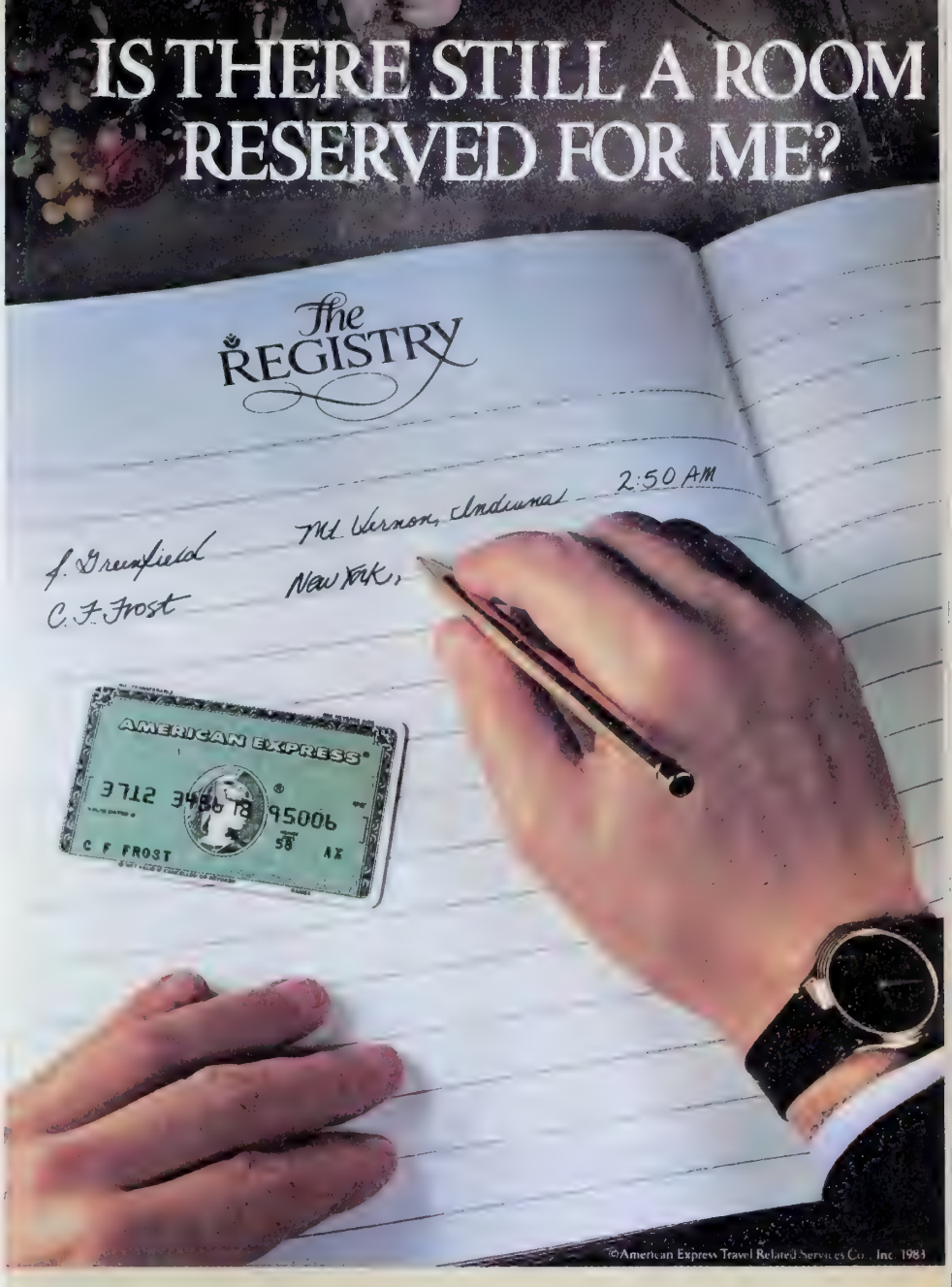
Banks and financial centers in supermarkets may seem a long way off but, in fact, the idea is catching on. Texas Federal Savings & Loan of Dallas, for example, has opened two full-service

Edited by John A. Conway

ranches in Randall's Supermarkets ı Houston, and five more have been iven regulatory approval. Another)allas thrift, First Texas, has opened ıree branches in local Kroger stores ince last fall and plans seven more in ıe area. Kroger, the Ohio-based hain, reports a growing trend toward ıpermarket banking. "It's because of ıe popularity of one-stop shopping," ıys a Kroger spokeswoman, "and eople are opening bigger supermar-ets." Kroger already has about 25 anks in its stores in 8 states (Indiana, 'exas, Ohio, Arkansas, Kentucky, irginia, Georgia and Tennessee) and ıys more are opening all the time. anks lease the space from the super-ıarkets and set their own hours. roger also has 70 automatic teller ıachines operated by banks in its su-ermarkets, and these, too, are in-reasing. Other chains opening their oors to local banks are Marsh in Indi-ıapolis, Jewel in Chicago and Smit-r's in Phoenix. Financial centers are ot far behind. Kroger has opened five) far in a joint venture with Capital olding Co. of Louisville, Ky., offer-ıg property and casualty insurance, ıoney market funds, mutual stock ıd bond funds, plus a service for edit card protection and registration household property.

Tax-free wages

he plan to let Americans tuck away ırt of their salaries tax-free, written ıto law in 1978 and into the IRS code 1981, is starting to boom. A survey 446 companies with sales of $1 llion to more than $10 billion by hiladelphia's Hay Group showed)% with a plan in effect at the end of st year, compared with 8% only six onths before, and another 42% con-dering one. "I think these plans are oing to be very widespread," says enneth P. Shapiro, a Hay partner. he new, so-called 401 (K) rule, al-ıough not yet made final by the IRS, lows employees to set aside part of ıeir salary tax-free, and 90% of the ırticipating companies offer match-g funds, usually 50 cents for every nployee dollar, to encourage partici-ıtion. The money can be withdrawn ıly when a person retires or leaves or case of hardship (buying a home, lness, education), but only a tenth of ıe total is then taxed. "In the next vo or three years," Shapiro says, nore than 50% of the major com-ınies will have 401 (K) plans." He so thinks 401 (K) will have con-



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siderably more than the "negligible" effect on tax revenues that the IRS predicted when it was first written into law. So far, however, no one at the Treasury seems to be alarmed.

Two points for Burundi

Burundi, a nation of just over 4 million peasant farmers with a per capita annual income of only $200, is one of the smallest and poorest nations in the world, with little health care, transportation or communications. But it boasts the Watusi tribe, whose members average 7 feet tall. That

The Watusis of Burundi
A gift from on high.

seems to be reason enough for the Reagan Administration, through its newly formed U.S. International Sports Committee, to make a gift of $10,000 worth of basketballs, hoops and nets to Burundi. The equipment may not be as much appreciated by the average-size Hutus (who now rule the country), even less by the Twa people, a pygmy tribe.

Welcome to our city

Hard times and high travel costs haven't put a crimp in the convention business, according to a new survey of 369 trade association executives. These groups continue to spend $16 billion a year on their annual confabulations, according to Readex, Inc. of St. Paul, Minn. "Attendance at conventions, contrary to popular wisdom, has remained steady over the past three years," says R. William Taylor, president of the American Society of Association Executives. Most of the 16,500 U.S. trade groups hold at least one convention a year, the survey says, with a typical delegate dropping at least $250 in the welcoming city. The bigger associations, accord-

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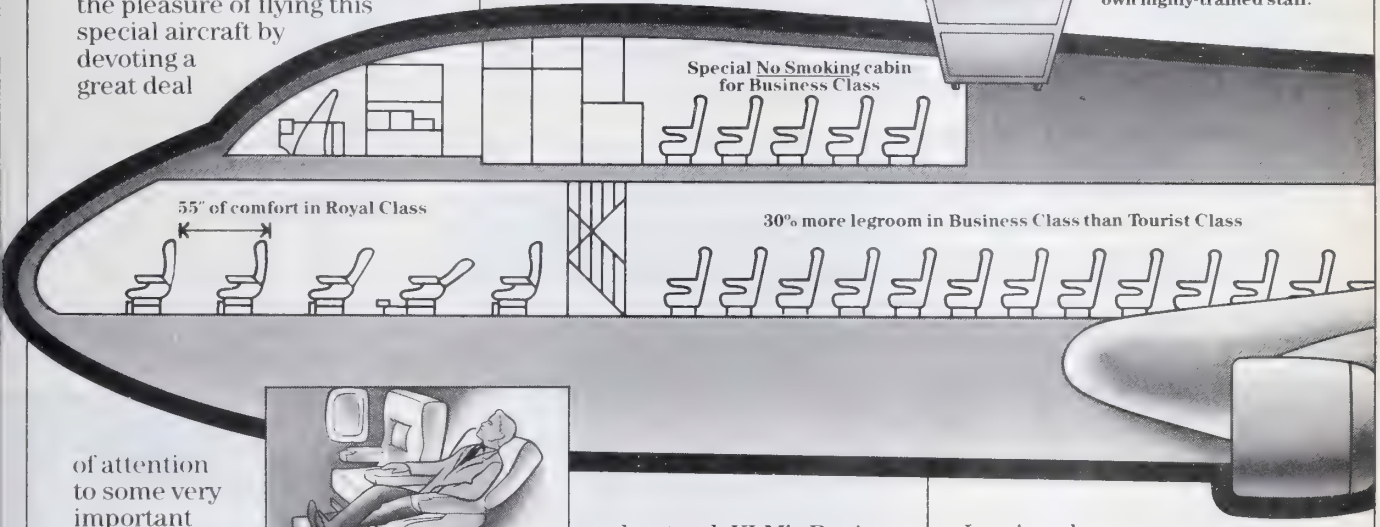

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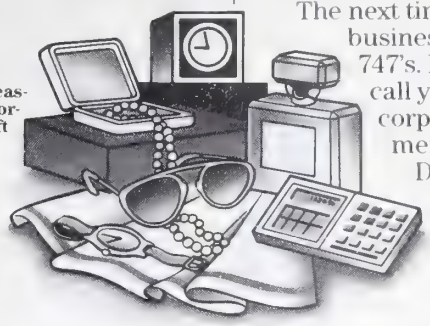

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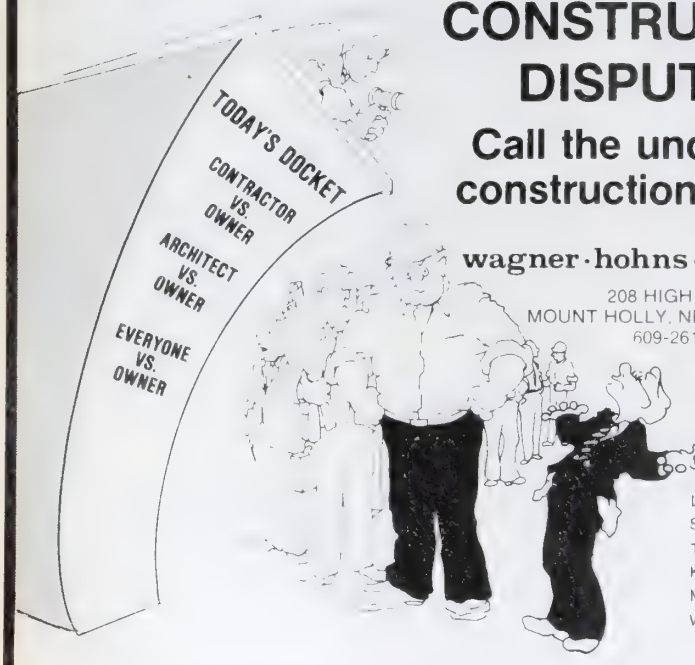

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ing to this canvass, now tend to stage their meetings in Atlantic Coast states, from Florida north to Washington, D.C. The second spot in popularity: the Pacific Coast.

Clang! Clang!

Trolley cars, part of the street scene until World War II, today are virtual museum pieces. But they are clanging into a comeback, say designers at Parsons Brinckerhoff, the New York firm that developed trolley systems in Detroit, Cleveland and San Francisco at the turn of the century. "After the war, trolleys were replaced by buses and private cars," says Winfield Salter, a PB senior vice president. "Now, with the cost of fuel, people are thinking differently." Called "light rail" systems in their modern incarnation, new trolleys are already running in Edmonton and Calgary in Canada, and San Diego now has a 16-mile line to the Mexican border. New lines are under construction or in the planning stage in San Jose, Sacramento, Portland, Ore. and Buffalo, N.Y. The American Public Transportation Association reports other plans under consideration in Denver and for lines

When trolleys ruled the streets
Clanging out of the past.

in Orange County, Calif. Systems in New Orleans, Boston, Newark, Cleveland, Philadelphia and San Francisco are being spruced up, and Pittsburgh is spending $480 million to modernize its 22 miles of track. Trolleys are more expensive than buses (a mile of track can cost from $7 million to $70 million), but they can handle twice as many people per hour, Salter

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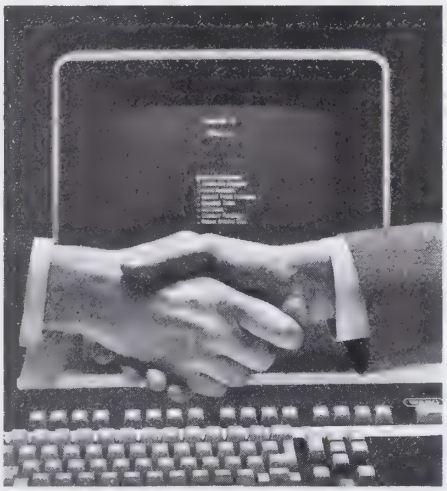

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says. Their return won't help U.S. manufacturers, however. Most of the trolleys these days, Salter says, come from Canada, Germany or Japan.

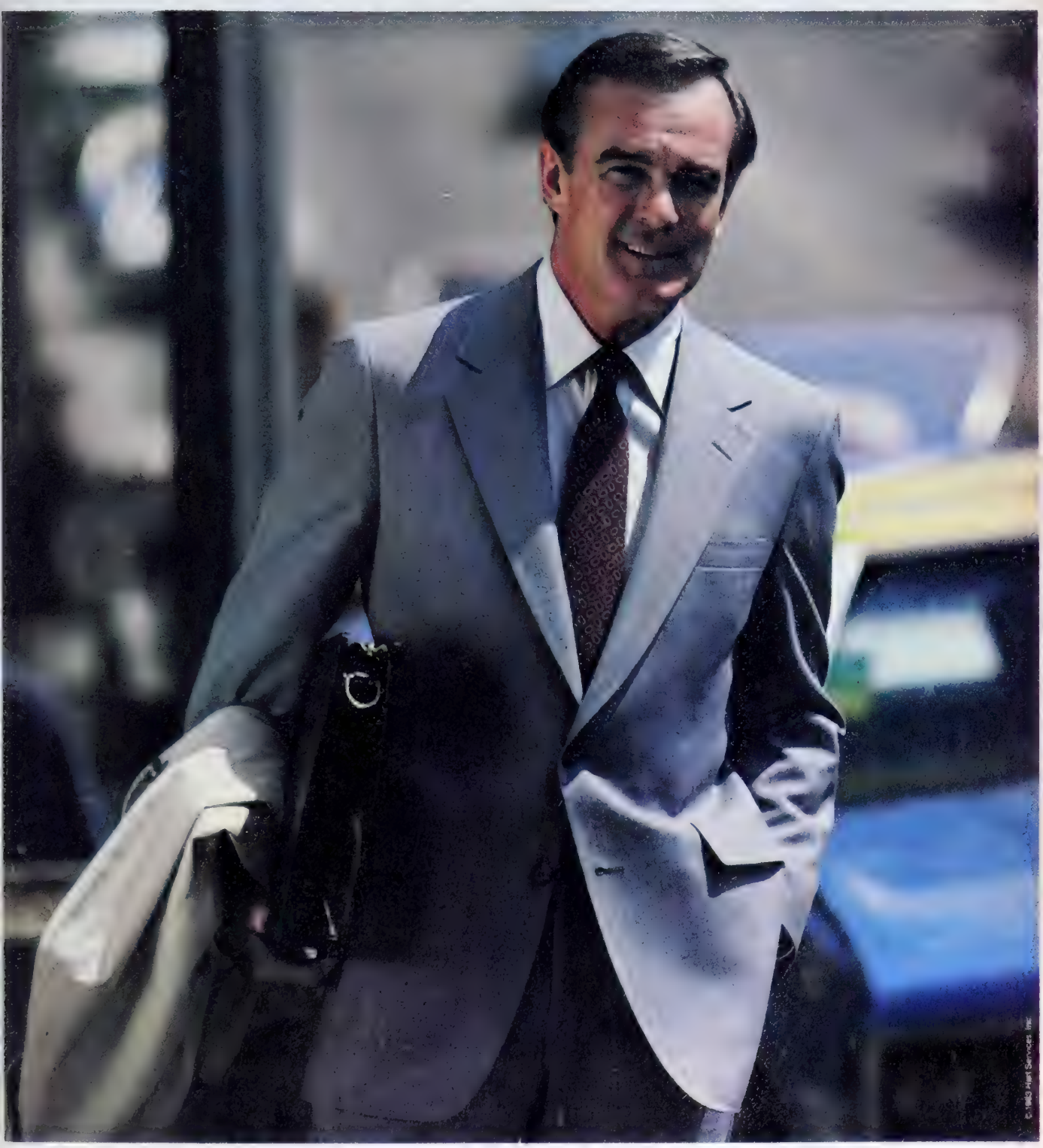
The paper chase

If you thought paper drives were over, think again. The American Paper Institute says 17.3 million tons of waste paper were collected by Boy Scouts, churches, synagogues and wastepaper dealers last year, selling for perhaps $25 to $125 a ton. That was down a bit from 1981, but the API says that 1983 could be a record year. Newsprint was as usual the big item; 3.5 million tons, about 34% of all newspapers printed, were recycled. The institute expects that to go up another 200,000 tons this year. "The pressure on the collection system could be the greatest ever experienced by the recycling segment of the paper industry," says J. Rodney Edwards, vice president of the API. By 1990, he adds, collection of recyclable paper could reach 24 million tons a year which, including exports, could mean a 28% recycling rate.

Junk no more

Once scorned as junk mail, the catalog and other direct marketing methods have garnered new respectability. Mail order sales were an estimated $125 billion last year, and the field has even received academe's blessing. This fall the University of Missouri in Kansas City will begin offering graduate and undergraduate programs in the art of catalog or telephone sales and the like, funded by a $570,000 grant from the New York-based Direct Marketing Educational Foundation. "Shopping is not an experience; it's a chore," says Martin Baier, a pioneer in selling insurance by mail and a part-time professor at Missouri. With more and more women working, he says, mail order catalogs and telephone sales have gathered momentum. Energy costs are another factor. "The shopping mall was created by the car," Baier says. "And it may become obsolete as the cost of driving continues to escalate." Mail order buying also gets a lift from computers, WATS lines, "interactive" television (where the ads carry a telephone-order number), credit cards and general consumer frustration, Baier says. By 1990, he estimates, sales-by-mail will account for 20% of all general merchandise sold in the U.S.

EXPERIENCE THE QUALITY... WITH STYLE



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Inspecting a map of the Beaufort Sea are, left to right, Diamond Shamrock's Vice Chairman Avery Rush, President Al Tomlinson, and Bill Bricker, Chairman and CEO.

"The conventional wisdom said, 'Global oil glut... trim your sails.' Diamond Shamrock responded with $161 million for five offshore Alaska leases."

— W. H. Bricker

On October 13, 1982 Diamond Shamrock successfully bid $161 million for exploratory leases off Alaska's north slope. With the price of oil down, why did Diamond Shamrock make the largest exploration commitment of its history?

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Follow-Through

Photo finish

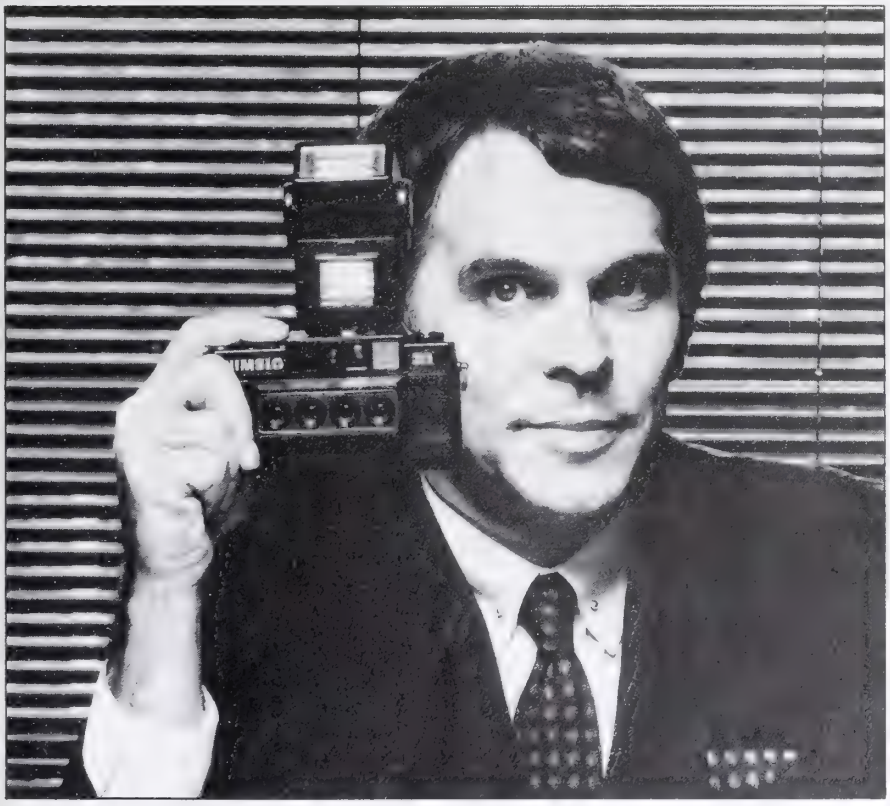
"This is a 15-round fight, and in the fourth round we got beat up," says Jerry Nims, the Atlanta honorary Ph.D. who last year brought out the $250 "Nimslo" camera to make three-dimensional snapshots (FORBES, *Oct. 25, 1982*).

Investors focused in on Nimslo's promise to grab 4% of the estimated $19 billion photography market with its 3-D system (created by Nims and his Chinese co-inventor Allen Lo), and the company's over-the-counter price climbed to $4.88. But Nims failed to deliver. Instead of 220,000 cameras, Nimslo International shipped fewer than 50,000 to dealers. Labor problems during the crucial market launch forced Nims to shift production from a Timex plant in Dundee, Scotland to plants of Japan's Sunpak and Ricoh. Dealers stewed, and shareholders got clobbered. The share price skidded to $1.15.

This might knock some entrepreneurs out of the ring, but Nims, who sold $47 million worth of stock in London and New York before selling a camera, insists, "We're going to win the fight." Sunpak is making 10,000 cameras a month, he says, so "Nimslo's production problems are over." Sales will pick up, he promises, as soon as the peak camera-buying season arrives this summer. He sticks to his 1981 forecast of capturing 4% of the world market by 1985 (or maybe 1986, he concedes when pressed).

Others see a different picture. "The 4% target is hopelessly high," says Keith Hodgkinson, who has followed Nimslo for L. Messel, the London brokers, since the company was launched on London's Unlisted Securities Market in 1981. Robin Sabalones, assistant manager at Grand Central Cameras in New York, agrees: "We sold 50 cameras at Christmas, which is pretty good for a gadget-type camera, but we have no plans to reorder." Adds Lowell Elsea, vice president of Photo Center in Miami, where Nims test-marketed his camera: "Our sales have literally come to a standstill," even discounted to $136 from the suggested $249 retail price. Reginald Duquesnoy, vice president for international research at Merrill Lynch, is more blunt: "The camera bombed out."

With 170,000 in projected camera sales blacked out, how has Nimslo stayed afloat? "We were well capitalized," Nims replies. His key backer,



Nimslo's Jerry Nims and his 3-D camera
The camera may not be clicking, but the capital is.

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Follow-Through

reclusive Norwegian shipping magnate and Timex owner Fred Olsen, has also kept faith. In January Olsen paid a $5.5 million royalty fee for the rights of a new French company, Fralsen, to distribute Nimslo cameras and process 3-D film beginning next year. Nims denies any cash-flow problems, but the French deal, observes Messel's Hodgkinson, was in effect "a capital injection through the back door."

Nimslo also bid recently to increase—from 16% to 45%—its stake in the Berkey Photo film processing and camera distribution group, in exchange for $10 million and two photoprocessing plants. Berkey will pay Nimslo, over time, a royalty of $10 million in cash and stock for rights to distribute 3-D cameras and process 3-D film. Paying $10 million is an expensive way to get back $10 million, but, Nims argues, Nimslo gets the economies of scale.

The market will not snap the shutter finally until at least summer, but shareholders certainly are in for no easy time. London analysts expect Nimslo will announce an $18 million loss for 1982.

Nims, however, is undaunted. "It's all part of the game," he says. "This is a high-risk, high-reward business."

The gold rush

In 1978 Jesse Helms, the GOP senator from North Carolina, put the U.S. into the gold coin business with a rider attached to an international funding bill. The rider directed the U.S. Mint to begin turning out millions of solid gold medallions celebrating such distinguished Americans as Louis Armstrong, Frank Lloyd Wright and Marian Anderson. When the medals went on sale, gold stood at $640 an ounce. A year later it was $400, and the mint had more than 900,000 medals gathering dust in vaults at West Point (FORBES, *Trends, Aug. 3, 1981*). The Treasury Department showed minimal interest in the medals, which were sold only through the post office. Red tape aside, that meant that every buyer was on immediate record with Uncle Sam, hardly a selling point for any self-respecting hoarder.

Last year the President's 17-member Gold Commission, chaired by Treasury Secretary Donald Regan, deliberated for more than eight months before deciding to do nothing about returning to the gold standard or minting real gold coins *(Follow-*

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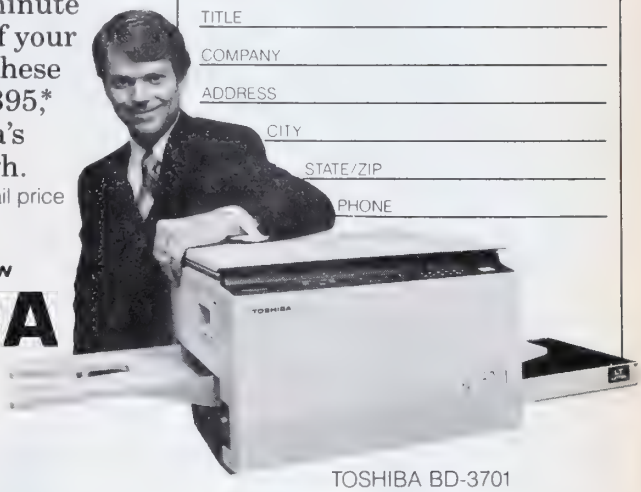

TOSHIBA BD-3701

"NOW THAT'S WHAT I CALL A DOUBLE EAGLE."

TOM WATSON, golf professional

Another view of a chemical company. Sequence 10

Héctor Gonzáles Aguirre, purchasing manager, talks about his wife Lucila Mora, a chemist with Henkel Mexico.

"At Henkel's 'Kitchen of the Future', Lucila does the cooking."

"Just up the road from here near the ancient pyramids of Teotihuacán, in Ecatepec, that's where my wife works, in the Henkel Mexico factory – there, where they make many products that our country urgently needs.

Lucila has been with Henkel Mexico since 1961 and has steadily worked her way up. She now heads the research and development lab which Henkel people often refer to as the 'Kitchen of the Future'. That's because new products are constantly being 'cooked up' or developed there. And, of course, tested there. Products such as adhesives. And basic chemicals for the pharmaceutical industry or for leather processing. And the vitally important auxiliary products for the petroleum industry which our country depends on.

In my mind, Lucila's professional career has been like the development struggles of our country. She was one of the first women to study at the Mexico City Polytechnic. It wasn't easy, and I am sure everyone expected her to fail. After all, a woman's place was considered to be in the home and with the children. But she proved she could make it. Recently Lucila even traveled to Germany to visit Henkel headquarters in Düsseldorf. While over there she was briefed on all the latest development projects that Henkel has in the works. Now when we sit together in the evenings and Lucila talks about the trip and the many impressions she gathered, our little daughter is all ears. So is my 75-year-old mother-in-law Josefina. Surely she's thinking about the changes she's seen in her lifetime, bringing opportunities that her daughter and grand-daughter can enjoy."

My wife Lucila.

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Follow-Through

Through, May 10, 1982). The Treasury maintained its determined lack of interest until, in mid-April, with the unfulfilled mandate from Congress to mint a million ounces into medals each year hanging over its head, it called for some help.

To move the hoard, Regan tapped Goldman, Sachs, the Wall Street in-

The Mark Twain medallion
A Wall Street touch for the mint.

vestment bankers. Its J. Aron & Co., a world-class dealer in precious metals, has agreed to take the medals off the Treasury's hands and market them through a network of banks, brokerage houses and coin dealers. (The last have been the chief outlets for highly successful foreign coins like the Krugerrand.) Aron will also maintain a market for the medals, thus providing a trading forum for anyone wishing to traffic in the rechristened "U.S. Gold." To spread the word, the Wall Streeters and Uncle Sam have brought in Benton & Bowles for a two-year, $8 million national newspaper, magazine and television campaign.

Will this added expertise empty those West Point vaults? Morris Sandler, the J. Aron vice president running the operation, is sure it will. Despite the lack of promotion and the cumbersome business of buying through the post office, he says, the public did buy about 600,000 ounces in the first couple of years of the program and made 3.5 million telephone calls to ask about it. As for the long term, he adds, only an estimated 2% to 4% of Americans now own gold. If that could be doubled, Sandler says, it could mean a healthy piece of business for Goldman, Sachs long after the last medallions roll out of the mint.

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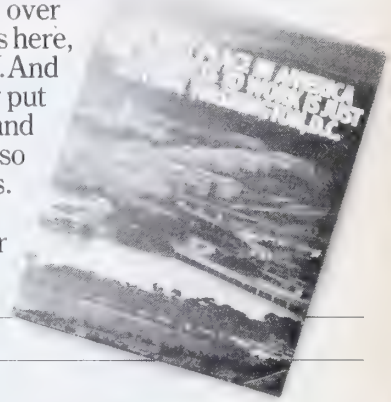

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Readers Say

One says nothing, two . . .

SIR: Re your comment, "Dear Networks—Please, please spare us gavel-to-gavel coverage of the presidential nominating conventions next year" *(Fact and Comment, Apr. 11).* I have stopped reading FORBES cover to cover.

Announcing what you may or may not do a year and a half in advance of what may or may not be a news event doesn't strike me as good journalism. So we've said nothing. And intend to continue doing that.

—Robert E. Mulholland
President and CEO,
National Broadcasting Co., Inc.
New York, N.Y.

SIR: I read your editorial with interest. As evidence of the fact that we share your view, I enclose an extract from a speech I made in October 1981.

—Thomas H. Wyman
President,
CBS Inc.
New York, N.Y.

SIR: It's not clear yet whether the arrangement with PBS that I proposed can be worked out, but there is no doubt at all that three-network, gavel-to-gavel convention coverage is an unproductive exercise.

—Leonard H. Goldenson
Chairman,
American Broadcasting Cos., Inc.
New York, N.Y.

He'll take it

SIR: So smart marketing grads don't want to sell ("Where are all the salesmen?" *Trends, Mar. 14*). Is this a replay of the just-hatched grad who asked the corporate president for a top management job? "Something like a VP, maybe."

"But we already have 12 vice presidents."

"That's ok. I'm not superstitious."

—W.M. Buescher
Pigeon Forge, Tenn.

Illustrative cover

SIR: Your cover in the Apr. 11 edition really points up your lead article.

—W.J. Driscoll
Maplewood, N.J.

SIR: What a terrific cover. . . .

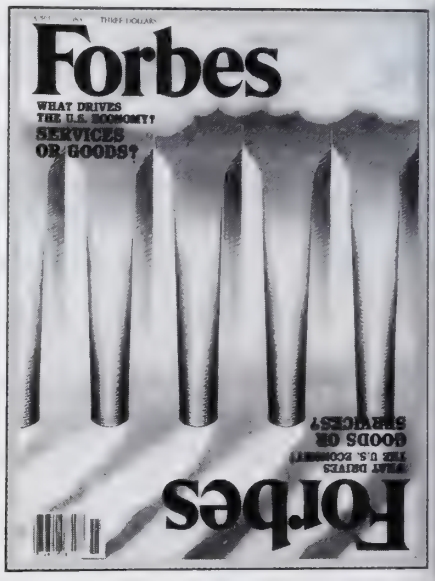
—Zillah Crowley
Oneida, N.Y.

SIR: Had smoke not been coming from one or two of the smokestacks, your cover [would] have more clearly represented the economy's present state.

—Edward G. Brouse Jr.
Hingham, Mass.

SIR: In picking up the Apr. 11 issue, I was amazed and grateful that you had at last printed an issue for left-handers. No such luck. Just another cruel April Fool's Day joke.

—Paul W. Marsh
Urbana, Ill.



Gore his ox, not mine

SIR: The conclusion of your article "A tax on OPEC" *(Mar. 28)* that "In the broadest sense, a tax on imported oil would hit OPEC, not the American consumer" illustrates confused thinking. A tax on imported oil would raise energy costs in the U.S. relative to other countries. U.S. industry would be at a cost disadvantage versus manufacturers in all other countries and there could be only one result: a shrinkage of U.S. exports and a further growth of imports.

A tax on gasoline at the pump, to encourage conservation, is an entirely different matter.

—Charles B. Reeder
Chief Economist,
E.I. du Pont de Nemours & Co., Inc.
Wilmington, Del.

Funds availability

SIR: In your article "The slow war on float" *(Mar. 28)* you say that "the

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Readers Say

check you deposit must . . . return to its bank before any funds go into your account."

Actually, the bank accepting the deposit will assign specific availability (of 0, 1 or 2 days for corporate customers) to the funds involved and will make those funds available on schedule regardless of when the check actually returns to bank of origin. Your account will be credited solely according to a) the availability that its bank assigns to the deposit, and b) the time of the deposit.

There are actually three ways for a bank of deposit to send a check back to the bank upon which it is drawn: through the Federal Reserve System, through another bank (both of which you mentioned) and also *directly*—via a courier for corporate accounts.

—Leslie N. Masonson
Vice President,
Citibank
New York, N.Y.

SIR: The title "The slow war on float" should be changed to "Fleeced by the float" in memory of all the consumers who continue to be unfairly burdened by it.

My own bank routinely places a 7-day hold on intrastate checks and a 14-day hold on out-of-state checks that are not its own.

An answer that may help—I will buy stock in my bank and profit from my own misery.

—Richard R. Curran
Buffalo, N.Y.

Who's biggest

SIR: Your article "Knowing when to say no" *(Mar. 28)* says Pima Savings & Loan is Arizona's largest S&L. Western Savings is Arizona's largest S&L and Home Federal Savings is Tucson's largest S&L.

—Robert J. Dreyer
Senior Vice President,
Director of Marketing,
Federal Savings & Loan Association
Tucson, Ariz.

Filing F&Cs

SIR: The reader who panned MSF Jr.'s new editorial section *(Readers Say, Feb. 28)* could not have been paying attention while he was putting out the best stuff in your magazine in recent years.

If MSF wants to do subscribers a

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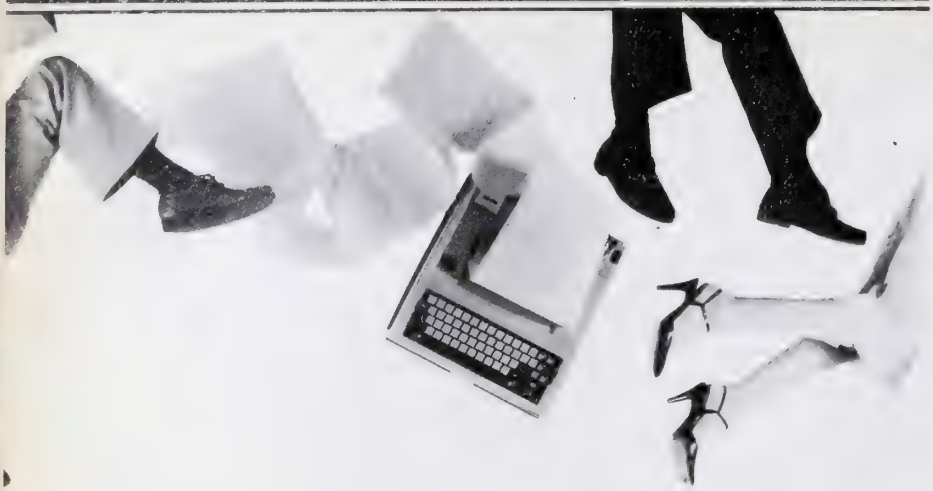

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Readers Say

favor, he should print his twaddle in the form of an insert that can be conveniently dropped into the round file upon arrival.
—J.O. Fletcher
Amherst, N.Y.

SIR: There are a fair number of outstanding economists in the land whose comments would be of value to your readers.

At least, at this time, much more so than MSF, junior grade.

A flagrant exercise in nepotism.
—R. Richard Wieland
Scottsdale, Ariz.

At last—the answer!

SIR: Years ago I studied the chicken-and-egg dilemma. A chicken is a bird; birds evolved from earlier forms, e.g., reptiles, amphibians, fish; reptiles, amphibians and fish lay eggs. Hence the egg precedes the chicken.
—George H. Pollock, M.D.
Director,
The Institute for Psychoanalysis
Chicago, Ill.

Birthday suit

SIR: A Linda Bryant is suing Mogen David for $10 million *(Other Comments, Feb. 28)* because their "deceptive" wine entrapped her husband into committing rape. If she wins, I plan to use that precedent to throw a lawsuit at the entire TV industry that will make hers look like peanuts.

I was born 65 years ago. If there had been TV at that time, my parents would have been watching *M*A*S*H* or *Three's Company* instead of bringing me forth to work my butt off and suffer life's slings and arrows.

In dragging their feet in its develop-

"Someday Muffy, all this will be yours, and when it is, remember these two things—don't eat our cafeteria food, and when you need a brokerage firm that specializes in product support financing, go with Ford Financial Services."

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Readers Say

ment by some 40 or 50 years, the TV people are responsible for my plight. What's a little rape compared to my complaint?
—Harry Mass
Burbank, Calif.

Heavy drug use

SIR: In "Not-so-flaming youth" *(Mar. 28)*, you refer to an 11.5% use of drugs by teenagers. This is on a daily basis. National Institute of Drug Abuse (NIDA) statistics also show that over 90% of all high school seniors have used drugs and that over 64% of these students use drugs on a periodic basis. The average age for beginning drug use is 11½ years old.
—Margery Ranch
Director,
Parents Who Care, Inc.
Palo Alto, Calif.

Chauvinist shrink

SIR: Some male headshrinker called women in their mid-30s who wish to become single parents "the most narcissistic group of people you'll ever see" *(Other Comments, Nov. 8, 1982)*.

Single parents aren't as ideal as loving couples, but the bottom line is that these babies are wanted.

They will have more confidence than kids whose parents quarrel continually or whose dads are too busy to show their love.
—Laurence Murrell
Culpeper, Va.

Painful homecoming

SIR: Thank you for your commentary on the Vietnam War Memorial *(Fact and Comment, Jan. 31)*. As a Vietnam veteran, the most painful part of my war experience occurred upon my return home. Our service was ignored, and we who served were ostracized at home [for] mentioning the war.

Keeping in mind the way America has treated its Vietnam veterans, who will answer America's call to arms in the next war? All things being equal, I would serve again. Most Vietnam veterans would.

We greatly appreciate America's belated honor and acceptance. Fifteen years of rejection has left its mark.
—Fritz Brown
Pittsburgh, Penna.

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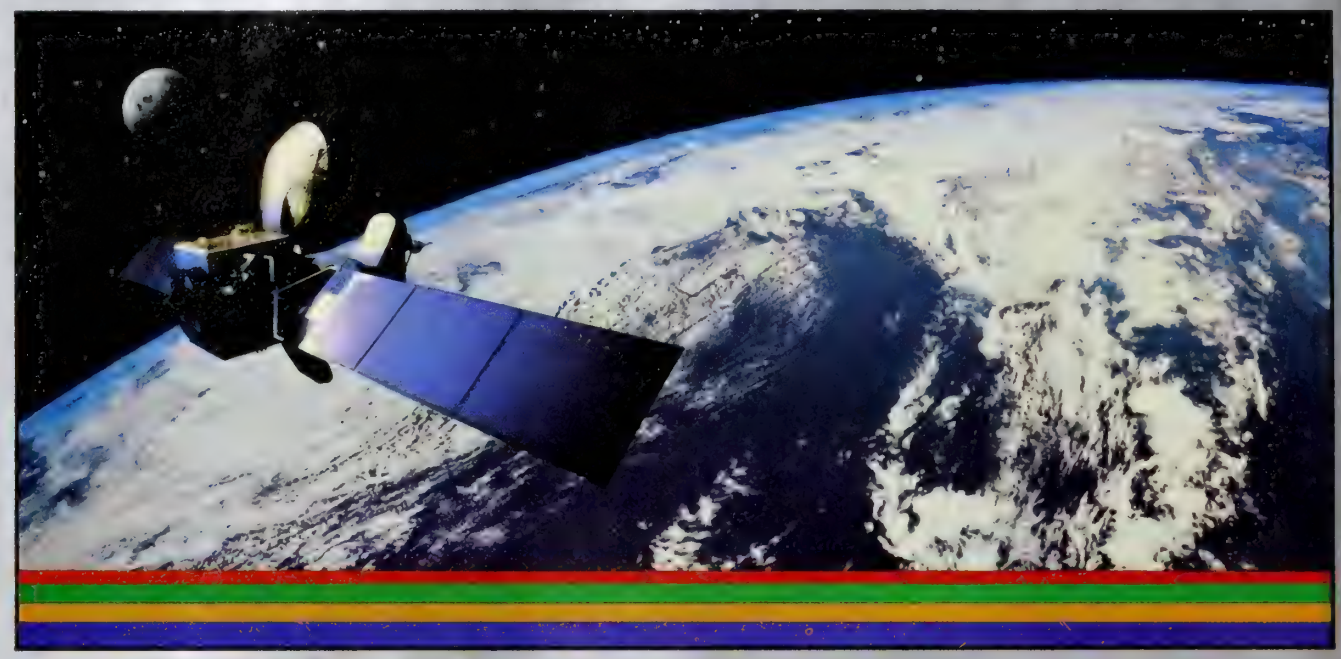

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Fact and Comment

By Malcolm S. Forbes, Editor-in-Chief

PUTTING THEIR MONEY WHERE THEIR MOUTHS AREN'T

Blaming the U.S. for most of their problems is usually good for bursts of applause among our allies, and even more frequently within the Third World than among our foes.

But where do they put what's nearest and dearest to 'em—their money?

Here.

In the last year and a half oversea-ers have invested more money in plant, real estate and businesses in the U.S. than ever before; for the first time, more than Americans have invested abroad. So, too, their cash stash in U.S. stocks, bonds and Treasuries soars. The French send the Socialists to power and their money to New York.

Abroad, they're more certain that Reagan's right about his policies' fueling U.S. recovery than are his critics on Capitol Hill.

We can take foreigners' verbal heat so long as they warm their feet at our fiscal fireside.

A DECADE AFTER THE INCOME TAX

was enacted in 1913, the total individual return was contained on two pages, accompanied by two pages of instructions—including this quaint bit of dubious verbiage: "The tax should be paid, if possible, by sending or bringing with the return a check or money order."

"If possible," yet!

THE TORRENT OF MEXICANS POURING INTO TEXAS

is absolutely unstaunchable by the Border Patrol. The Mexican government has its hands full coping with a peso that has collapsed even more than the price of oil.

The most effective way to control illegal immigration—and Mexico is far from being the only source, though it's the major one—is to make the employing of those illegally in the country illegal. *Costly* illegal, with repeated employing offenders subject to increasingly severe penalties.

Our country will never shut its borders to political refugees. But there's no way the U.S. can be open sesame to all who wish, with relative ease, to enter illegally.

* * *

Incidentally, do you realize that the General Accounting Office conservatively estimates $1 billion a year is now being paid in Social Security benefits to those here illegally?

IF JUST ONCE THE KREMLIN WERE TO HELP

us put out fires of conflict instead of inflaming them, can you imagine the extraordinarily positive impact it would have for the U.S.S.R. throughout the world?

I guess there just isn't sufficient imagination in Moscow to realize what the Russians could reap if, for instance, they'd given vigorous verbal support to Great Britain when Argentina's right-wing junta had its military seize the Falklands.

If instead of trying to exploit, when not actually igniting, difficulties for the U.S. around the world (and, for that matter, in outer space), the Kremlin's commissars offered us a hand in solving or dissolving a crisis or two, what an impact it would have. Even one such dramatic gesture would defuse now skyrocketing tension between the two superpowers. Conceivably, détente could be warmed up again.

Any such significant action would do much to disarm—literally and figuratively—the U.S. and the West.

THE SECRETARY OF THE NAVY PAID FORBES A VISIT

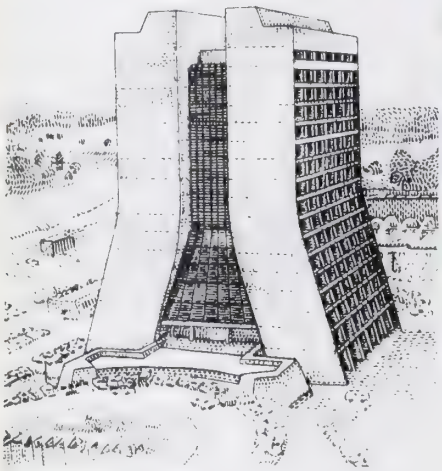
the other day, and it was soon clear that not many barnacles are attached to his hull.

Under the Reagan Administration, the three Service Secretaries have once again been charged with significant responsibility for their forces' states of readiness, quality of materiel, morale and caliber of personnel. And they now provide important input on proposed new systems.

Navy Secretary John Lehman's off-the-record observations about such matters as the F/A-18, the two contemplated new carrier groups and the proposed freeze on pay scales reflect a maturity and balance that one hadn't suspected existed so high in the Defense Department these days.

The Navy seems to have a good man at its helm. He should keep his hands there—and off the independent Center for Naval Analyses at the University of Rochester.

UPSIDE DOWN "Y" FOR MICKEY, PETER & ATOM SMASHERS



(left to right) *Sketch of the Fermi National Accelerator Laboratory in Illinois; the Contemporary Resort Hotel in Orlando; and the W.R. Grace & Co. building in New York City.*

A couple of months ago, on an editorial page of the *Wall Street Journal*, I saw this sketch *(left)* under the heading "Fermilab: Utopia on the Prairie." Having just returned from a visit to Disney Production's Epcot in Florida, I said to myself, "Ah, an article on what the Mickey Mousers have wrought on the former rangelands of Orlando, illustrated with their famed Contemporary Hotel, an A-frame wonder of the architectural world."

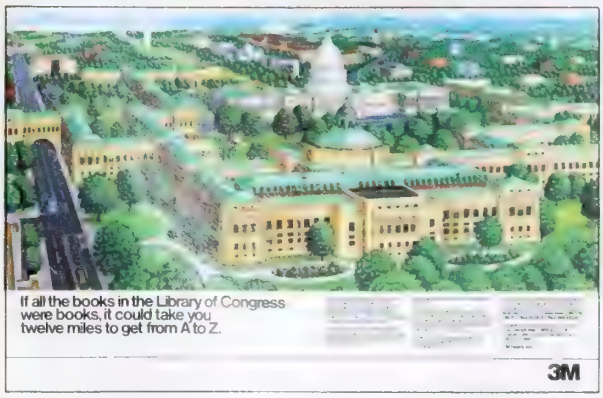
It wasn't, though. This look-alike is not the hub for the creators of Minnie Mouse and Mickey, but is the center for the creators of the world's mightiest mousetrap—it is our biggest atom smasher, Fermilab, and it's located in Batavia, Ill.

These two buildings reminded me of the same inverted "Y" that makes so dramatic Peter Grace's W.R. Grace & Co. headquarters in New York. All three of these strikingly splendid, superbly functional edifices show again that great architecture can be great art.

IMAGINATIVE JUXTAPOSITIONING: ONE SELLS, THE OTHER REPELS

This 3M fantasy setting of very familiar facades combines with caption and copy to make clear the inestimable value of 3M's microfilming technology.

On the other hand, have you seen a more appallingly inappropriate "fashion" promotion than this one that appeared in *Houston* magazine? The copy, in addition to pointing out that the "pink mohair jersey party dress" is $575 and that the hair is "by Claudie for Jacques Dessange," gives a photographic setting credit (!!) to "the Hermann Hospital Life Flight helipad."



A WAY WITH WORDS

A few well-chosen words can paint a better picture than most artists can. For example, these two bits from Ted Simon's *Jupiter's Travels* (Penguin Books, $4.95):

"The giraffe glides through the air as though in free fall."

* * *

"A bank of cumulus cloud appears out of thin air and grows with stealthy speed into the solid likeness of doom itself. In an otherwise clear sky one of these monsters straddles the road ahead, growing at a mile a minute, like an airborne octopus of mythic proportions, its base filling with inky blackness, already feeling out the ground with stray tentacles."

THE NAKED TRUTH—NEARLY

'Tis said that life's full of coincidences, and the other phrase used to express the same thought is the comment about a "small world." Here's one of those situations recollected in a letter received recently from George D. Ryan of Sherborn, Mass.:

"You may recollect the amusing circumstances of our meeting aboard the QE2, crossing the Atlantic in August last year.

"When I walked into the sauna room to make an appointment for a massage with Eric, manager of the ship's fitness center, he noticed I was carrying a FORBES magazine, and he asked if I were with the organization. My tongue-in-cheek response was: 'With the organization? I am the organization!'

"To which Eric replied, pointing to the face-down body on his massage table, 'Perhaps you'd like to meet this imposter, Malcolm Forbes.'

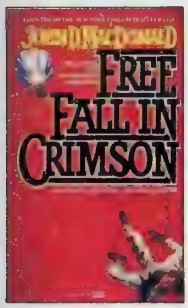
"Talk about an embarrassing moment!"

Soon after, together at the ship's bar, we undid all the good the sauna had done.

IT'S A RARE MIRROR
that provokes reflection.

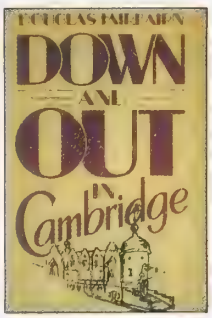
SO LITTLE
can reveal so much.

BOOKS



● **Free Fall in Crimson**—by John D. MacDonald (Fawcett Gold Medal, $2.95). A murder mystery involving bad-guy motorcyclists and smarmy Hollywood types, with the denouement taking place in hot air balloons.

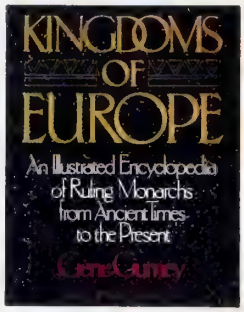
Excerpt: *It seemed that an awful lot of people were into dying. The "in" thing this year, apparently. No chance for practice. You had to do it right the first and only time you got to do it. And you were never quite certain when your chance was coming. Stay braced at all times.*

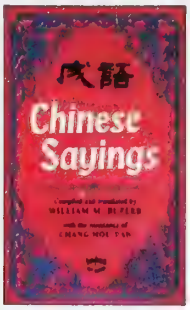


● **Down and Out in Cambridge**—by Douglas Fairbairn (Coward, McCann & Geoghegan, $14.95). A writer who couldn't get published for the longest time tells self-sympathetically of his travails growing up, his extraordinary years of living-in at the *Harvard Lampoon*, his odd jobs as a medical guinea pig, a dishwasher and crew member on yachts. Somewhere along his writing line, Mr. Fairbairn developed the habit of repeating sentences repeatedly, which may be effective once, but ad infinitum becomes ad nauseam.

Excerpt: *"Let me give you a couple of words of advice," Alfred said. "If you want to get along on a yacht, all you have to do is treat the owner like God, the captain like Horatio Nelson."*

● **Kingdoms of Europe**—by Gene Gurney (Crown Publishers, Inc., $20). This is just what it says—"an illustrated encyclopedia of ruling monarchs from ancient times to the present." The photos aren't the best, but the profusion—1,780 illustrations—helps. The facts are here, but they read like a text, which is what many were, in part prepared for the U.S. Army.





● **Chinese Sayings**—Compiled and translated by William M. Bueler (Charles E. Tuttle Co., Inc., $4.50). The daily phrases and clichés in Chinese conversation are in this *ch'eng-yü* "dictionary," with their English counterparts. For those of us not studying Chinese, though, some of the literal translations into English, placed in parentheses, are absolutely beguiling.

Excerpts: *To be self-sufficient (to supply the self with enough for the self); a secret cannot be kept forever (paper cannot wrap up a fire); to find a needle in a haystack, to look for a needle in a haystack (to pick up a needle from the bottom of the sea); taking advantage of one's connection with a powerful person (the fox simulating the authority of the tiger); dreaming of obtaining impossible pleasures (a toad thinking of eating a swan); as a man sows, so shall he reap (if one plants melons, one gets melons).*

Other Comments

Often comments by others stimulate, irritate, abuse or amuse this editor's mind.–MSF

Evaders Extraordinaire

In March 1982 the Commissioner of Internal Revenue, testifying before the Congressional Subcommittee on Oversight of the IRS, presented a set of estimates of tax losses due to the subterranean economy: For 1981 the federal individual income tax loss was put at $85.9 billion to $89.6 billion, plus another $3.9 billion for corporate income taxes, and $12.3 billion lost owing to overstated expenses and deductions. This means that the personal income tax losses resulting from subterranean economic activities amounted to roughly 30% of the taxes actually collected through the federal personal income tax, no mean figure.

—Professor Peter M. Gutmann, City University of New York, in *The Conference Board Magazine*

Executive Training

Companies, concerned with consumer worries over the quality of U.S. goods, have sent their executives to "quality colleges"—institutes that teach company officials the latest methods for cutting down defects and increasing production on the assembly line. In addition, executives are consulting workers as never before. In the last few years, such companies as Ford, Westinghouse, TRW and Honeywell have established hundreds of "quality circles" that give workers an opportunity to speak out about problems and offer new ideas on producing goods more efficiently. Numerous innovations have resulted, at substantial cost savings. At Pontiac division of General Motors, workers even have authority to shut down the assembly line if they think that quality standards are not being met.

Still other firms are operating on the revolutionary premise that the less direction, the better. . . . Explains one corporate official: "In a companywide review, we discovered that there were too many executives without adequate input." He cites a recent study showing that large American companies have an average of 12 layers of management, while their Japanese counterparts make do with seven or eight.

—*U.S. News & World Report*

Fat Chance

Americans [according to authors Janet Policy and Peter Herman in their book, *Breaking the Diet Habit*] have a puritanical belief that all fat is excess, waste matter that can be stripped off through hard work. Anybody who stays fat must be weak-willed and morally corrupt. But the fact is that some fat is natural, necessary and probably hereditary.

—*Connoisseur*

Pluperfect Planning

Alan Cadan's four-year-old necktie business booked sales of $1 million last year. Mr. Cadan, 42 years old, runs the business from his house in Stamford, Conn. He is the only full-time employee. He manages that because he is well organized. He's probably that way, he says, because he admired an uncle who was a compulsive organizer. The uncle wrote his own obituary and died on a weekend, his family says, so as not to inconvenience his loved ones.

—Sanford L. Jacobs, *Wall Street Journal*

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Winning, of course, is one thing. Keeping is another.

—Lyle Stuart, *Casino Gambling for the Winner*

Good-bye Gas Guzzlers

"There is an experimental Peugeot car out now that is getting 93 miles per gallon. What that will mean for our industry is almost impossible to comprehend."

—Jack A. Blum, counsel for the Independent Gasoline Marketers Council in the *New York Times*

1,400 Pistols versus 1,200

"In a world of nuclear overkill and redundance, the United States and the Soviet Union are like two rivals locked in a small room in a duel to the death where one has 1,400 pistols and the other 1,200. The one with the 1,400 has no advantage when one or both of the parties are likely to be killed or maimed with the first pistol shot."

—Representative Jim Leach (R–Iowa), in remarks to the House in support of a freeze on nuclear arms

U.S.' Foremost Jokester

- I know a religious guy who loves his neighbor—but he can't stand her husband.
- If the early bird catches the worm, why doesn't the dumb worm stay in bed?
- He told me: "When I was young I had a terrific sex drive. It was 25 miles to the motel."
- He said to her: "You're the best little wife a guy ever had—even if your husband doesn't think so."
- Married men, they have two ages: when they want to be faithful and are not, and when they want to be unfaithful and cannot.
- One way for a husband to get the last word is to apologize.

—Joey Adams, *New York Post*

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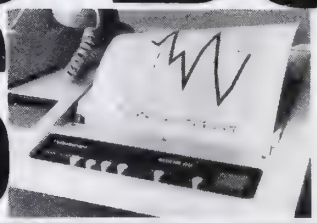

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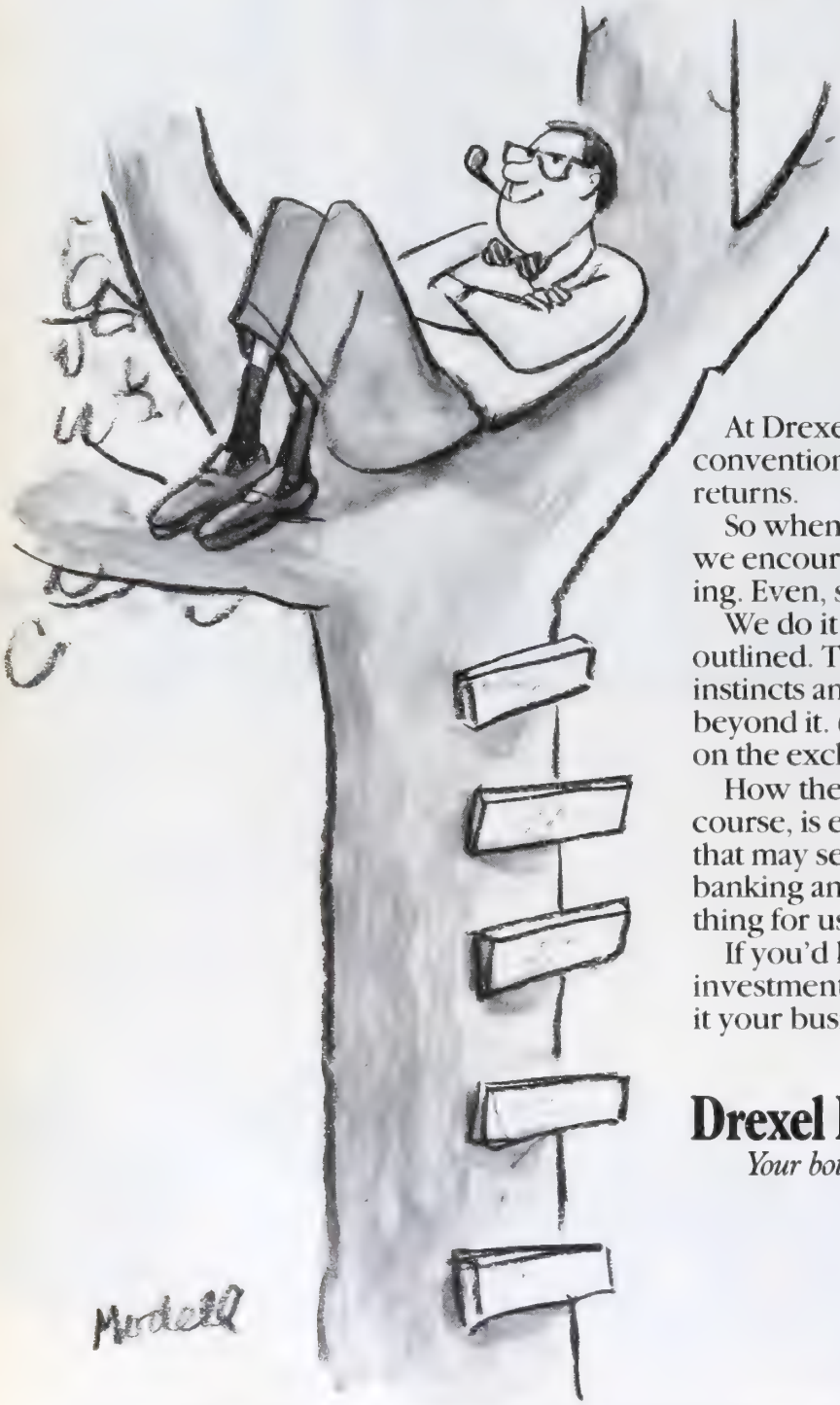

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Fact and Comment II

By M.S. Forbes Jr., Deputy Editor-in-Chief

THE NEGATIVE WAY

that Congress is reacting to the Administration's Central American policy may be a blessing in disguise. It may hasten the inevitable day when the President must explain in a major address to the American people what's at stake in this region.

Soviet domination of Central America would profoundly affect our security for the worse. It would certainly lead to a major effort to destabilize an already troubled Mexico and, ultimately, to install a Castroite regime there.

Anyone who thinks Central America is Vietnam ought to look at a map. Vietnam is 10,000 miles from our shores. The distance between El Salvador and Texas is shorter than that between Texas and Massachusetts.

The notion that the El Salvador Marxists are valiant agrarian reformers doesn't square with reality. As FORBES has pointed out in the past, El Salvador was on the verge of an economic takeoff when it came under Marxist attack. The guerrilla movement is controlled by Cuba and the Soviet Union. The guerrillas know the only way they can win power is through violence. That is why their leadership won't participate in free elections.

The noncommunist governments in Central America are not perfect, but they are light-years away from the kind of totalitarian regime that exists in Cuba, Vietnam and Cambodia and that is tightening its grip on Nicaragua.

Soviet brazenness in our backyard grows. The Russians are pouring weapons into Cuba at an unprecedented pace. A few months ago a Soviet-financed coup took place in Surinam, and the new "people's leader" is busily butchering his opponents. It's not even inconceivable that Moscow may try a 1962-type installation of missiles in Cuba and Nicaragua under the pretext of countering our placing of Pershing and cruise missiles later this year in Western Europe. Soviet officials have already been warning of "serious consequences" if we go ahead with stationing these weapons.

Despite the fundamental stakes involved, congressional Democrats sense the Administration's political weakness, and they can't resist playing a destructive role regarding Central America.

The President cannot much longer avoid a major speech on this truly vital subject. He must attempt to revive the Monroe Doctrine. He must bring around public opinion to back whatever steps may be necessary to counteract these Soviet moves.

If a Nicaragua or a Surinam wants to experiment with Marxism, fine. But when they become Soviet cat's-paws, Soviet satellites, that should be another matter entirely.

SHORTSIGHTED RULING

The Internal Revenue Service wants to force companies to capitalize the costs of developing computer software, instead of allowing them to deduct these expenses immediately *(see Taxing Matters, Apr. 11)*.

The Administration and Congress should stop the IRS in its tracks.

Such a rule would gratuitously hurt research and development in an area where we're ahead of the rest of the world and that is vital for future economic growth. Software is what makes computer hardware work. Capitalizing rather than expensing these costs puts a tax on this important activity. It would provide a disincentive in an area where we least need it.

The U.S. economy was badly hurt in the 1970s by underinvestment. Inflation enormously increased the tax burden on capital-intensive companies because it forced companies to under-depreciate assets, thereby sharply increasing the cost of new plant and equipment. So we got a lot less productive investment than we should have had.

Inflation didn't hobble software development because costs could be written off immediately. High tech in this country flourished.

Forcing companies to capitalize their R&D costs for software is, in effect, a tax on the development of knowledge. The few extra dollars Uncle Sam would get would be offset manyfold in lost economic growth.

There is no better example of that old cliché: penny-wise, pound-foolish.

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Edited by Thomas O'Donnell

ANYONE HERE SEEN A CONSUMER?

OLD JOKE: A FELLOW WHO LOST HIS WATCH ON Main Street is asked why he's looking for it on Maple Street. "Because," he explains, "the light is better here." Business people anxious about consumer spending should keep that old joke in mind as they ponder the figures.

Even in bad light the numbers aren't bad

OVER ON MAPLE STREET, WHERE THE LIGHT IS GOOD, some of the figures aren't half bad. Auto sales in early April rose 32%. Retail sales, as reported by the Commerce Department, are only superficially disappointing—up a scant 0.3% in March, the first increase since November. But factor out the decline in gasoline prices and they look better. Department store sales are up and so, too—by a healthy 16%—are sales at stores selling computers and electronic games.

But What's Ahead believes consumer spending is even more robust than that. Trouble is, the light isn't very good over in the service sector of the economy, where consumers are spending more of their time—and dollars—nowadays. Take the numbers counting retail sales. "You don't have hair salons, psychologists, vacations or other services in there," points out economist Michael Flanagan of Data Resources.

Where is the market basket for services?

THE SHIFT IN CONSUMER SPENDING PATTERNS is making the very term "market basket" obsolete. But yardsticks able to measure and compare expenditures in the service sector have yet to be designed. A truly reliable index may take three to five years to develop.

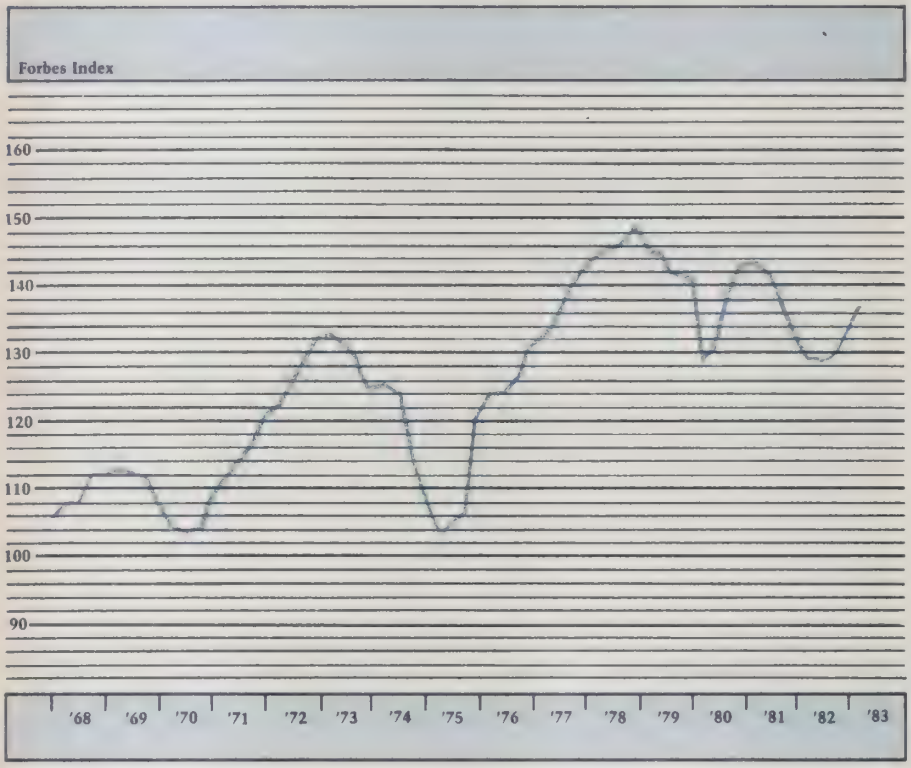
While everyone waits, What's Ahead expects consumer spending, in both the light and dark places, to accelerate as the year goes on. It will allow the recovery to last well into 1984. The Conference Board's index of consumer confidence increased more than 10 points, to 76.5, in March, its third consecutive monthly gain. In addition, the surge in the stock and bond markets has boosted the household sector's net worth by more than $300 billion since the middle of last year. House prices are firming as consumer interest rates continue to decline. And tax refunds totaling up to $12 billion will soon be in the mail. Finally, despite all the noisy misgivings in Congress, expect the Administration's third tax cut to take effect in July.

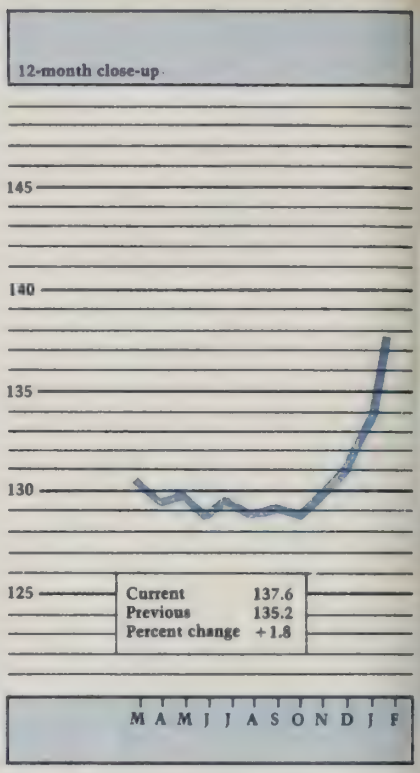
Who will measure the invisible?

EVEN UNEMPLOYMENT IS BEGINNING TO DIP. It's yet another part of the economy in sore need of better measuring devices. The underground economy, heavily service-oriented, may now account for about 15% of GNP. Because individuals in the underground are not counted as working, the actual unemployment rate, some authorities say, may be more than two percentage points lower than the official one.

Is everything rosy, then? Not by a long chalk. Inflation rates remain low, but the capital markets, judging by the real returns lenders continue to insist on, apparently don't believe they will stay that way. What's Ahead believes consumers are doing their bit, and more, in leading the economy out of the doldrums. Now, if only Washington can do something to convince the money markets. . . .

The Forbes Index





Up but not away. The Forbes Index has posted its fifth consecutive increase. Consumers, gaining confidence that the recovery is for real, are largely responsible.

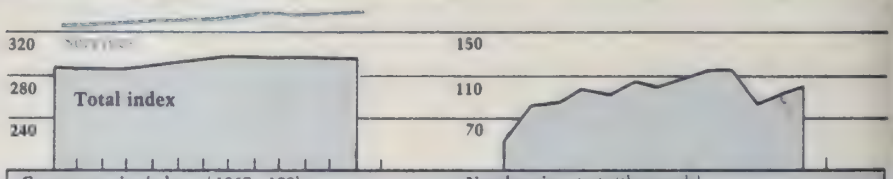
Retail store sales were up 0.3% on a revised basis during the latest reporting period. That compares with a 1.2% decline in February. Installment credit outstanding expanded by 0.5%, but that is less than the 0.9% increase a month earlier. These figures indicate that consumers are spending but have yet to spend big.

Then there's the negative news. New claims for unemployment edged up slightly in March. This is disturbing, since it follows four consecutive monthly declines.

The Forbes Index Components

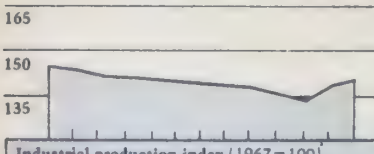
The Forbes Index is a measure of U.S. economic activity composed of eight equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, the level of new orders for durable goods compared with manufacturers' inventories, total retail sales, new housing starts, personal income, the change in the amount of consumer installment debt outstanding.

To measure these eight elements, Forbes monitors 11 series of U.S. government data. The last 14 months' data for each series are presented at right.

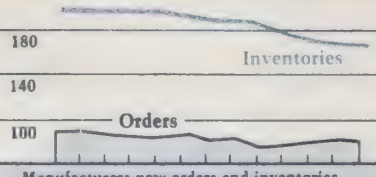


Consumer price indexes (1967 = 100) all urban consumers, unadjusted (Dept. of Labor)

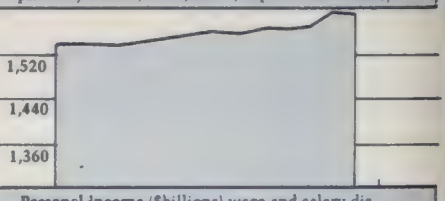
New housing starts (thousands) privately owned, unadjusted (Dept. of Commerce)



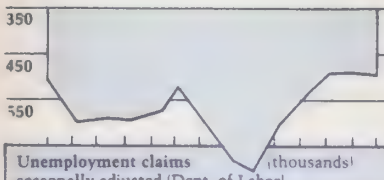
Industrial production index (1967 = 100) Seasonally adjusted (Federal Reserve)



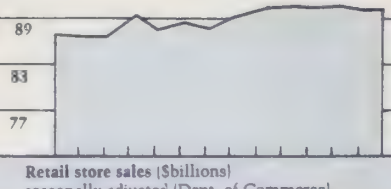
Manufacturers new orders and inventories ($billions) seasonally (Dept. of Commerce)



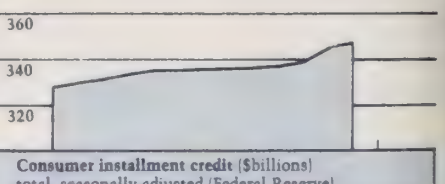
Personal income ($billions) wage and salary disbursements, seasonally adjusted (Dept. of Commerce)



Unemployment claims (thousands) seasonally adjusted (Dept. of Labor)



Retail store sales ($billions) seasonally adjusted (Dept. of Commerce)



Consumer installment credit ($billions) total, seasonally adjusted (Federal Reserve)

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The Mercedes-Benz 240 D Sedan strives for levels of running efficiency that make it seem almost an outlaw among $24,000 automobiles today.

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Mercedes-Benz engines–with proper care and upkeep, of course –seem to wear well. Over the years, the company's offer of radiator badges to owners clocking two hundred thousand, five hundred thousand and one million kilometers has had thousands of takers.

More than just numbers

But the 240 D's joys transcend the numbers recorded in its owner's log. It encapsulates its extraordinary efficiency in an extraordinary vehicle.

Its undercarriage is one of its most exotic elements: a fully independent suspension system with diagonal pivot rear swing axle. Abrupt directional shifts prompt no wallowing. Bad roads are almost casually absorbed; how relaxing, not to veer away in panic from potholes.

◀ The Sky Harbor Photovoltaic Project, Phoenix, Arizona: This Mercedes-Benz 240D Sedan and the solar cell power plant surrounding it have an identical aim–to use energy as efficiently as possible.

Steering is acutely precise. A built-in steering system shock absorber intercepts ugly jolts. Even the springs in the seat beneath you are meant to serve as so many tiny vibration dampers, tuned as they are to the car's suspension motions.

You can select a four-speed manual or four-speed automatic 240 D version. So efficient is this automatic that it barely affects fuel mileage. The shift lever is tunnel-mounted and so ergonomically correct that you can move it through the gears, manual style, without needing to take your eyes off the road.

Deep comfort

Like every Mercedes-Benz, the 240 D ensures that you live well en route.

Your deep sense of comfort derives in part from a sense of spaciousness. The rear seat area is almost five feet wide, for example. The seats themselves are sculpted to complement the human anatomy, and firm-feeling because Mercedes-Benz knows this helps keep you comfortable-feeling over long trips.

The 240 D is the most affordable Mercedes-Benz sold in America by some several thousand dollars. But there is only one Mercedes-Benz quality standard: thus light-alloy wheels and four-wheel disc brakes are among its standard items. Even electronic cruise control, central locking system, four-speaker AM/FM stereo radio with cassette player, and air conditioning are basic 240 D equipment.

The carpeting underfoot is fine velour. The clock on the dash is a quartz crystal chronometer. Those delicate fillets of woodlike trim before you are all fillets of authentic, hand-rubbed zebrano wood.

Built with an eye to 1993

While it may not be the last car you ever need to buy, the 240 D is built to help keep the conscientious owner off the new-car market for a good long time.

Its body is precision-welded at 4,786 points into a rigid steel unit. The whole structure undergoes a zinc phosphate bonderizing process to impregnate the steel with anticorrosion protection, and is coated five times with other primers and paint.

A car built with care can be backed with confidence. And the 240 D is backed with a three-year or 36-thousand-mile warranty.†

When you buy the 240 D, you buy an automobile with 120 individual safety features designed into it at the start. You also buy an automobile that has been shown, over the first three years, to retain 86 percent of original value.

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*Suggested retail price p.o.e. New York. West Coast prices slightly higher. **EPA estimate for comparison purposes. The mileage you get may vary with trip length, speed and weather. †This is, of course, a limited warranty; you should consult your authorized Mercedes-Benz dealer for full details.

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The new futures market in crude oil is more than another game for speculators to play. Its development could well be signaling the long-awaited end of the age of OPEC.

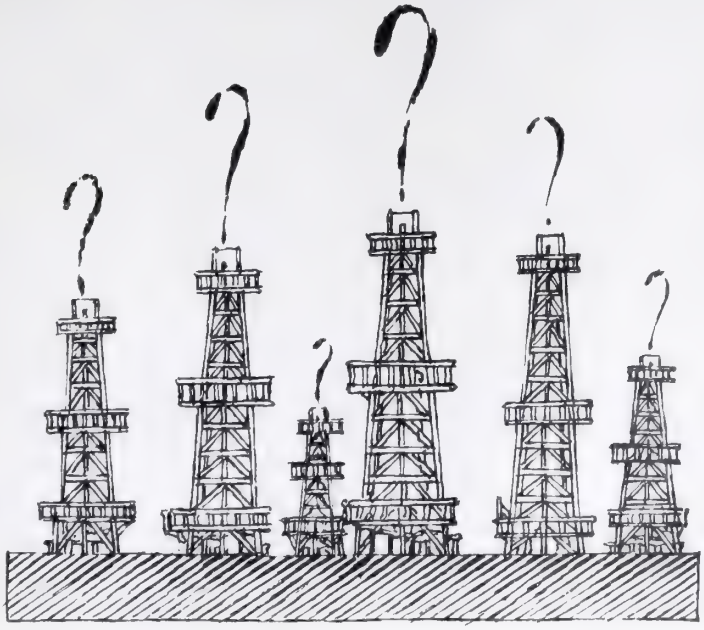
Comeuppance

By James Cook

WATERSHED EVENTS are sometimes signaled in mundane ways. Consider the beginning, last month, of trading in crude oil futures on both the New York Mercantile Exchange and the Chicago Board of Trade. At first blush, it could be dismissed as merely one more game for speculators to play. More likely, it announces the end of OPEC's domination of the world oil market.

Its significance has been obscured in the rush of events. Despite all predictions to the contrary, the Organization of Petroleum Exporting Countries has again managed to hold together, maintaining a semblance of solidarity in the face of the world's oil surplus and its members' desperate need for revenue. But the solidarity of OPEC is no longer the point. The rise of a futures market in crude announces that the conditions that made OPEC possible, that permitted it to control prices in the $350 billion oil market, have radically changed.

Before OPEC, oil had been one of the world's most stable commodities. Its price was set by the big international companies more or less independently of the operation of any free market. The majors divided the world among themselves as far back as the Twenties. From the early Thirties on, the Texas Railroad Commission effectively maintained prices in the U.S. by balancing supply in the light of demand. OPEC picked up in the Seventies where the internationals left off, adjusting available supplies to the level of demand, though in a somewhat more haphazard fashion, to maintain upward pressure on prices.



But no more. Where once it set prices, OPEC now ratifies prices forced on it by an increasingly free market. That's because buyers and sellers alike, alarmed at the prospect of shortages, began turning more and more to the spot market for supplies—in single, one-time transactions. Thus, when the spot market went through the roof following the Iranian revolution in 1978, OPEC ratified the rise by following it partway up. Then, this March, scarcity having given way to surplus, OPEC ratified the spot market again by following it partway down.

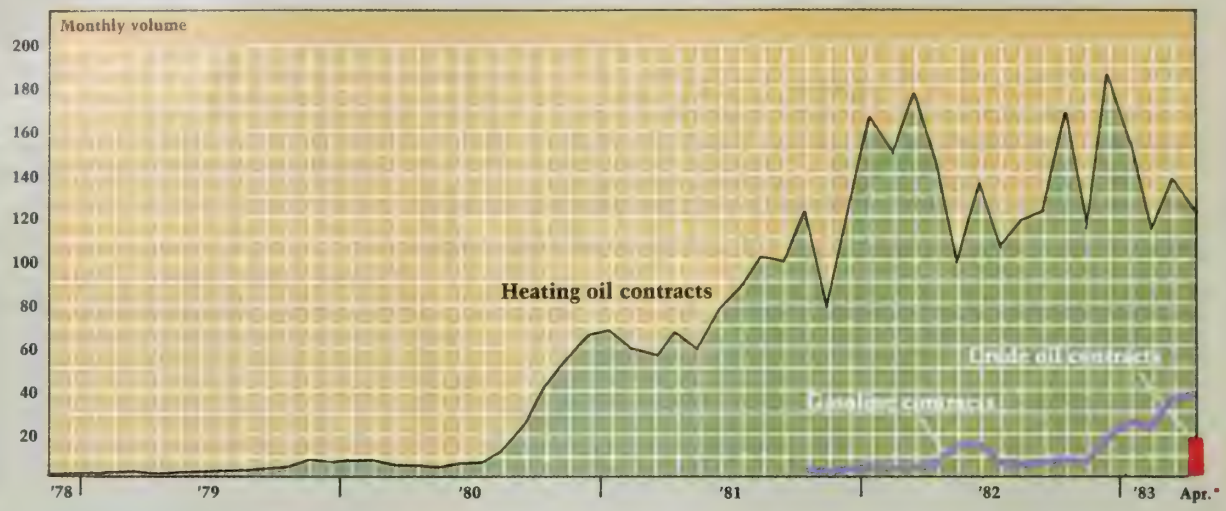
OPEC now follows, rather than leads, because of a major change in the habits of buyers and sellers. Until a few years ago, well over 95% of the world's oil moved under long-term contracts specifying volumes and qualities at prices posted by the producers. From wellhead to gasoline pump, the oil business was dominated by the giant international companies, the Seven Sisters. The spot market was inconsequential.

But during the Seventies, a thriving spot market began developing in Rotterdam. As supplies tightened, producers who wanted higher-than-contract prices—OPEC producers included—could get them by moving into the spot market. Consumers who couldn't get oil anywhere else could get it, at a price.

Now the trickle is a flood. According to some estimates, 20% to 30% of the world's crude and refined products now moves at spot prices—as much as 50% in some areas overseas. Contracts are still being written, but for shorter terms, for 12 months or so rather than open-ended. Reports Arnold E. Safer, president of

Countervailing power

The development of the futures markets on the New York Mercantile Exchange and elsewhere is beginning to offer an alternative to the administered prices that have prevailed in the oil industry for the last half century. The chart below shows the dramatic rise in monthly volume in heating oil, gasoline and crude oil futures contracts (1,000 barrel units) from the time trading in such contracts was begun.



*Projected from first eight trading days of April.

The Energy Futures Group, the Bethesda, Md. consulting group that devised the first heating oil contract for the Mercantile Exchange: "Some large companies tell me, 'We're not taking any more oil long term. We're buying everything spot.' "

OPEC has only itself to blame for the rise of the spot market and the resulting upheaval. It took a while, but its members are now learning the truth in an old proverb: "God says, 'Take what you want, but pay for it.' "

By assuming the equity interest in their own production, OPEC's member states cut off the majors from the production base that had always supported their refining and marketing businesses. The majors became the "tax collectors for OPEC," in consultant Walter Levy's phrase, and as long as supplies were tight, they were not inclined to resist. The Aramco partners—Texaco, Exxon, Mobil and SoCal—profited enormously in the late Seventies by being able to acquire Saudi oil at official OPEC prices, and such prices were well below what the spot market was charging.

"As ye sow, so shall ye reap," runs another proverb. In the oil glut of the Eighties, the Aramco majors, held to contract prices far above the spot price, lost as much as $8 on every barrel of Saudi oil that they sold. By early 1983 or so, the Justice Department charged they were pressuring the Saudis to cut back the price.

The newly resistant majors, combined with the rapid rise of the Rotterdam spot market, have thus radically changed OPEC's present role. OPEC today may influence the price, may even help to stabilize the price, but it clearly is no longer able to control it. "The oil market today is an unstable market, both up and down," Arnold Safer says. "The reason is, there is no single group today that controls the production and distribution of crude."

Which is why the futures market, affording buyers and sellers an insurance policy against price fluctuations, came into being. The New York Mercantile Exchange first tested the waters five years ago by creating a market for heating oil futures, then for gasoline in 1981, and finally, last month, for crude oil itself.

The market has taken off. With large-volume heating oil consumers like New York City and the Southern California Rapid Transit District locking in their contract price by hedging in the markets, heating oil contracts—running to 2 billion barrels—have quadrupled most years since 1978. The newer gasoline contracts are growing twice as fast.

The new market for crude futures is obviously attractive to independent producers and to a biggie like Gulf, bereft of its Middle Eastern properties, as well. Sun bought a seat on the Mercantile Exchange. By and large, though, the majors understandably regard it as bad news indeed. By fragmenting the market, futures trading will make producers' efforts to balance supply and demand much more difficult. "Futures trading," one oil executive warns darkly, "is playing with dynamite."

Yet much the same transformation has taken place in the copper business, where integrated producers used to set the price, not minding what prices were doing on the London Metal Exchange. But governments began taking over mines in the Seventies, and now all the producers' copper contracts are pegged to the LME or the New York Commodities Exchange.

Will the same thing happen in oil? Yes, at least for now. The futures market is a mighty small tail to wag such a very big dog, but as long as massive surpluses threaten the market, that, in effect, is what is likely to happen.

That doesn't mean, however, that OPEC is dead and buried. Let supplies tighten again one day, and the OPEC countries—the marginal suppliers—will regain much of their power over the oil price. But not all. Given a sellers' market for any reason, resurgent demand or political upheaval, they could even try to dominate the market as the oil companies used to by integrating forward into refining and marketing—as Kuwait has been doing and as Venezuela is trying to do. But until then, the price signals of the market are likely to prove more potent than OPEC's fiat. As John Lichtblau of the Petroleum Industry Research Foundation puts it: "There's no way the contract market won't be influenced by the futures market and vice versa." ■

Is there no alternative to giving the IMF a massive injection in order to solve the world credit mess? Yes, but most politicians and bankers would rather not hear it.

Write down loans? Perish the thought

By Howard Banks

As we all have been told in numbing detail, the international loan mess is about to be papered over with a $32 billion increase in the funds available to the International Monetary Fund. At least $8.4 billion, and probably more, of the IMF quota increase—a 47.5% boost in the fund's lendable deposits—will come from the U.S. However you cut the situation, it's another taxpayer bailout of other people's mistakes.

The Reagan Administration strongly supports the quota increase for the IMF, the vast credit cooperative created by the 1944 Bretton Woods agreement to help its 146 member nations when they have balance of payments problems. The Reagan Administration fears that the more than half-trillion-dollar debt overhang of non-OPEC Third World countries might stall any chance of domestic economic recovery. Hence its eagerness to help the IMF.

Without IMF aid, many Third World countries will not be able to meet even the interest payments on their monumental debt, and those debts would have to be written down in American banks' books. That means the banks would be less able to lend to American industry and business in order to fuel the nascent domestic recovery. And Third World countries would be unable to keep up even a minimal level of importing, which would further dampen business in America.

Goodness knows, the exposure of the major U.S. banks is nothing to sneeze at: Manufacturers Hanover has close to $7 billion lent out to the less developed countries (245% of equity); Chase Manhattan, $6 billion (220%); and Citicorp, $9.8 billion (200%). The nation's ten largest banks have an average of 170% of their equity lent to the Third World. It's a scary situation, but it isn't reflected in bank earnings or balance sheets. The reason it isn't reflected is that even where interest payments are late, the loans are not being classified—as would be the case with domestic loans. Where no cash interest is forthcoming, the banks simply tack unpaid interest onto principal that isn't being repaid either. Thus U.S. bank revenue and profitability look better than reality might suggest *(see* FORBES, *Apr. 11).*

Bankers' interest in maintaining that none of the Third World debts is bad coincides with the Reagan Administration's desire to maintain lending, particularly to Latin America, whose political stability is vital to the U.S. Moreover, the IMF can do what the U.S. government cannot do: force the debtor governments to adopt less irresponsible fiscal policies.

There are two questions involved: Is it necessary to avoid default at any cost? And, is it right to ask the taxpayers to bail out bankers' bad loans? For those who think the answer to both questions is "no," there is an alternative course of action. Paul Craig Roberts, until recently an assistant secretary at the Treasury, explains: "The alternative to an IMF bailout is not

The IMF's worry list

These ten countries are on the International Monetary Fund's "most worried" list. It is not how much they owe—their debt to the IMF is small compared with the billions of dollars they owe to governments and commercial banks. The worry is whether they can pay back anything at all. The comment is FORBES' summation of the IMF's concern.

Country	Debt to IMF in millions of SDRs	Comment
Mexico	300.9	Hit by falling oil prices but expected to recover, poorer but wiser.
Brazil	498.8	Hit by recession—and import restrictions imposed by others in trouble—but helped by falling oil prices.
Argentina	820.8	Hit by cost of lost war over Falklands and paralyzed by a military government that has no idea of economic management.
Chile	419.8	Copper's tarnish rubs off on the Chicago school.
Rumania	776.5	A Balkan country that gives despotism a bad name.
Hungary	214.5	Nobody at the IMF is losing much sleep over this one these days.
Sudan	450.5	A basket case that cannot be cut off for humanitarian reasons—and also for fear that the Soviets might take over.
Uganda	243.0	The ghost of Idi Amin still walks.
Bangladesh	374.1	Have pity!
Jamaica	561.9	Just, maybe, recovering.

Note: Poland is not a member of the IMF, for which its officers give nightly thanks.

default, but a partial writedown of some of the loans"—to a more rational and realistic value in the banks' books. The effect on bank profits would be sharp, of course. But so it should be, says George Champion, the respected retired chairman of Chase Manhattan, who refused point-blank to allow the Chase in his day to lend to any foreign government or government-owned entity. Champion agrees with Roberts that the banks should be made to bite the bullet. Champion says: "It [would] mean cutting down on the published earnings of the banks very materially, and that is what they [bankers] object to. It would mean that a lot of those fellows who have been getting big bonuses would be without them." What about the bankers' jobs? "Some of them should get the sack, no question. Management has to be held accountable."

Not surprisingly, bankers now in charge do not agree. "That's unfair," says George Clark, a senior vice president at Citicorp. "We may still be showing these loans at full value and not writing them off against revenues. But look at our stock prices. Our multiples are at 5 to 6 times earnings. I'm feeling considerable pain through my stock options."

No one is suggesting there should be any suicidal change in banks' accounting policies. "It has to be realistically handled over a number of years," says Champion. What he has in mind is for banks to write down all nonperforming loans using 50% of their pretax profits, creating each year an extra quarter percentage point of reserves. "They are going to show enormous first-quarter earnings," he says. "It's a terrific opportunity to start."

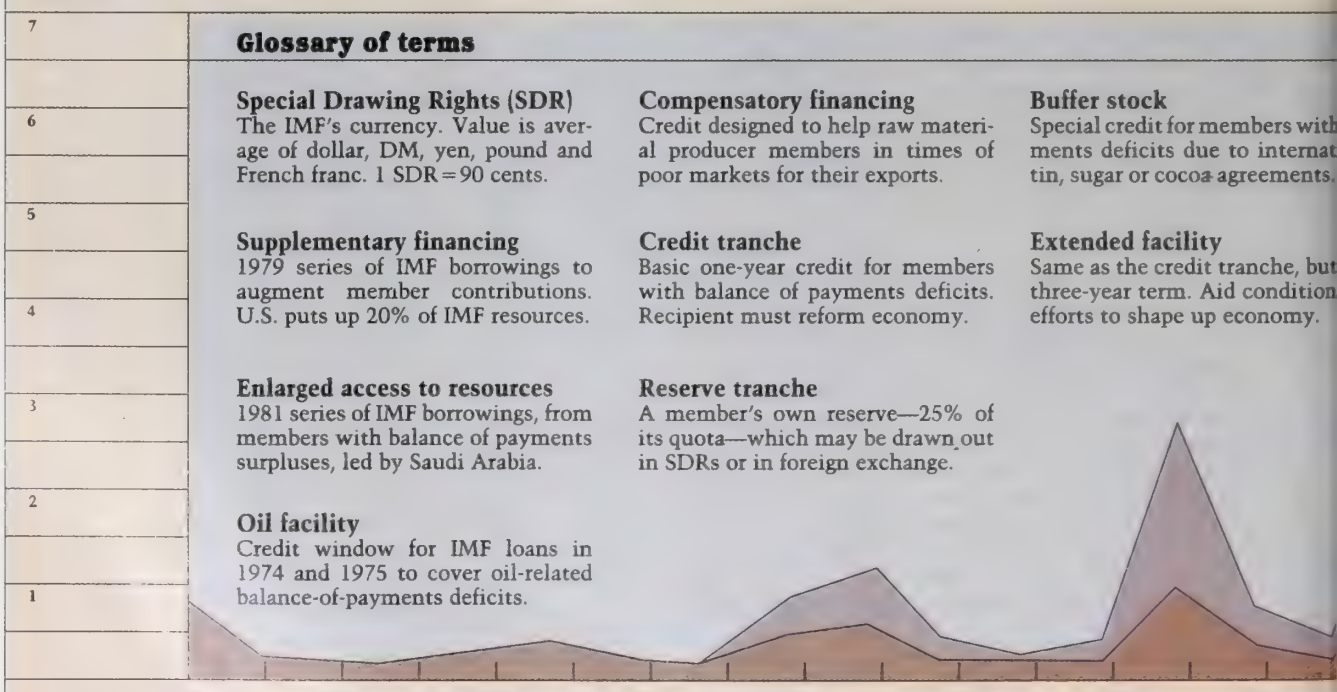
Those who support the take-the-writedown argument claim that a writedown of the face value of the loans on the lenders' books would immediately reduce the debt of the borrowing nation, while also reducing its interest burden. The developing nation's economy could then work at returning to health with its finances in more realistic order. There would be those developing-country governments, undoubtedly, that would see in the apparently reduced debt burden an opportunity for more borrowing. But would any bank be foolish enough to lend to them? The market *is* attentive, as witness the fact that the Philadelphia National Bank, which has never lent to developing countries, can borrow in the money market cheaper than most banks in the U.S.

There is *(see box, p. 59)* a sharp contrast between the U.S. banks' behavior and that of West German banks with large suspect loans to Eastern Europe and Latin America. There are difficulties in making direct comparisons between such different tax and accounting systems as they affect banks, warns Citicorp's Clark. Even so, he acknowledges that the impression is broadly correct.

There is a measure of hypocrisy in the U.S. banks' public stance that none of their Third World loans is going to stay bad. In their credit policies they are behaving far more cautiously. At first, banks took fairly narrow spreads on loans to developing countries (LDCs), particularly where there were other opportunities for business, such as setting up a local offshoot. But now, spreads and fees have been jacked up. Take the recent

The rocky road from Bretton Woods

This graphic history of the International Monetary Fund depicts the promise and problems of the system devised at Bretton Woods, N.H. in 1944. The IMF was created to help nations with anticipated payments deficits to the U.S. I by the mid-1950s, the Fund needed a special credit to c with the growth in world trade financed by the outflow



Glossary of terms

Special Drawing Rights (SDR)
The IMF's currency. Value is average of dollar, DM, yen, pound and French franc. 1 SDR = 90 cents.

Supplementary financing
1979 series of IMF borrowings to augment member contributions. U.S. puts up 20% of IMF resources.

Enlarged access to resources
1981 series of IMF borrowings, from members with balance of payments surpluses, led by Saudi Arabia.

Oil facility
Credit window for IMF loans in 1974 and 1975 to cover oil-related balance-of-payments deficits.

Compensatory financing
Credit designed to help raw material producer members in times of poor markets for their exports.

Credit tranche
Basic one-year credit for members with balance of payments deficits. Recipient must reform economy.

Reserve tranche
A member's own reserve—25% of its quota—which may be drawn out in SDRs or in foreign exchange.

Buffer stock
Special credit for members with ments deficits due to internat tin, sugar or cocoa agreements.

Extended facility
Same as the credit tranche, but three-year term. Aid condition efforts to shape up economy.

emergency $5 billion loan to Mexico, organized under IMF pressure (and on top of a $3 billion IMF facility). The banks are charging 2¼ points over the London interbank offered rate (the base rate of the Eurodollar market) and massive fees—said in all to exceed $600 million. Even though no actual money changes hands, these fees appear on the good side of the banks' income statements.

"I think it's outrageous," says Champion of these practices. "If collected at all, these fees should be paid over the life of the loan. If the loan is paid, then take your profit." Indeed, that is one of several, mostly cosmetic, changes now being proposed by the Comptroller of the Currency as part of a move to fend off a still small but growing pressure in Congress against bailing out the banks.

The liquidity crisis in the Third World came to a head for the U.S. last summer (FORBES, *Oct. 11, 1982*), when falling oil prices and declining demand meant that Mexico could not meet its repayment schedule. It then became painfully clear that the developing countries, especially those not

Judgment? Or only accounting?

West Germany's Dresdner Bank (assets $7.6 billion) is as deeply involved in Latin American lending as any of the U.S. money center banks. But unlike them, Dresdner is not publicly denying Latin American problems. Its South American subsidiary used all its record 1982 earnings for provisions against its Latin loans. Dresdner increased consolidated operating earnings 52% in 1982, but showed no increase in net, instead setting aside $413 million to cover writeoffs and loan risks.

Deutsche Bank showed a 17% fall in 1982 net, increased its dividend 10%, but put around $1.25 billion into reserves, on top of $500 million in 1981.

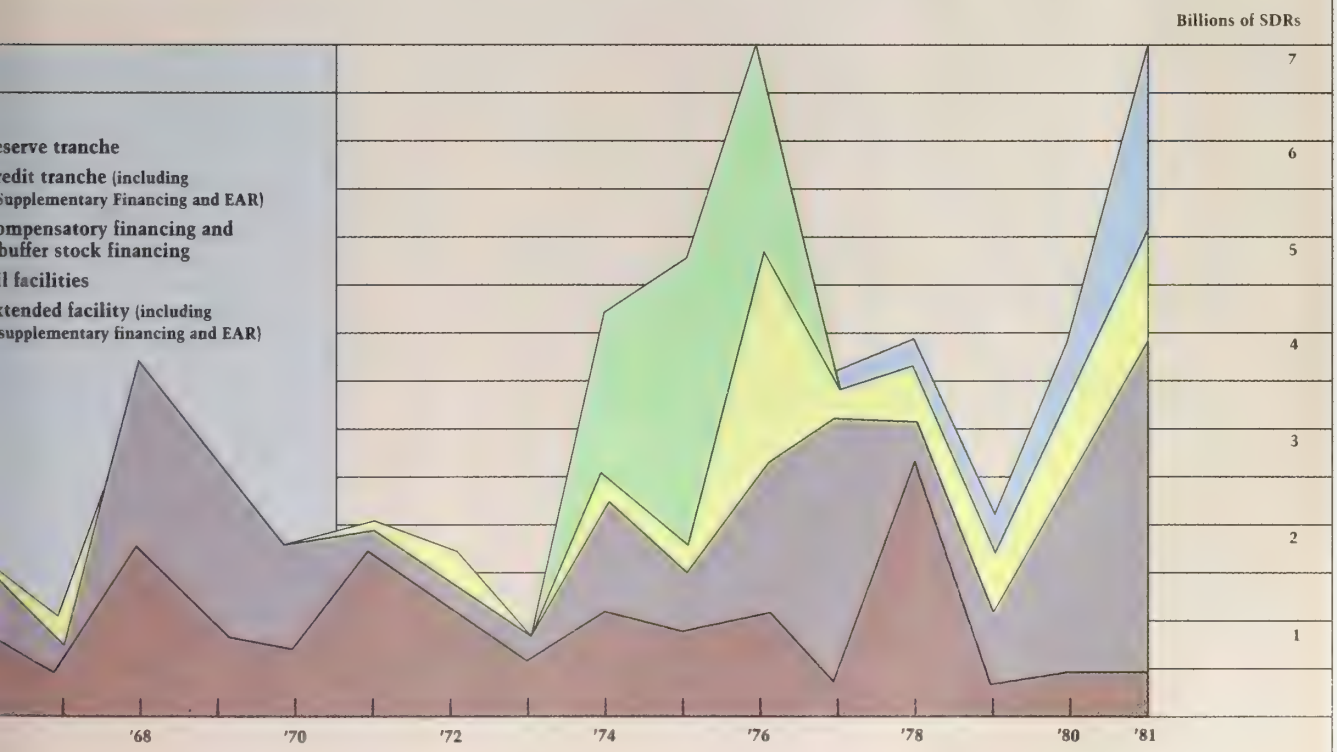
Meanwhile, in the U.S., Citicorp and Chemical Bank increased their dividends in 1982, but neither they nor any of the other money center banks increased the percentage of their bad-debt provisions.

Differences in judgment, but also tax and accounting systems, play a part. U.S. bank supervisors hold that where IMF is involved, loans will not be classified—counted as bad debt when interest payments are 90 days late. German authorities have pushed their banks to make sizable provisions.

It is easier to do in Europe. Accounting standards allow hidden reserves, and there are tax differences. Germany is liberal in allowing banks to deduct loan writedowns. By contrast, the Internal Revenue Service has reduced the tax-allowable reserve of U.S. banks to 0.6% from an already miserly 1%.

The figure should normally be 3% and 5% now, says former Chase Chairman George Champion. "Remember," he observes, that "they lost 1% on their REITs business."—**H.B.**

lars from the U.S. That outflow weakened the dollar's bility and, therefore, the world system. In the 1970s, IMF seemed to grow as it helped nations adjust to oil and currency instability. But it has really shrunk—from 12% of world trade in the 1960s to under 4%. Without new financing, it may wither.



members of OPEC, had built up vast levels of debt to the West, debt that they were quite unable to cope with without help.

The Administration's response was to shift suddenly from skepticism to enthusiasm for the IMF solution, even though it threatens credit distortions by giving the banks an implied guarantee on foreign loans. The motives were commendable, the thinking muddled, because until then the Administration had remained true to its principles and had argued for trusting the free market rather than for an IMF solution.

If the market is trusted, there seems little chance that a default by a country would today produce more than a quick scare for the markets and fat losses for the banks concerned. But the losses have, in reality, already occurred. Some observers, like Representative Jerry Lewis (R–Calif.), a member of the House Appropriations Committee, even suggest that—as a lesson to all—it might be worthwhile foreclosing on some debtor nation that has behaved in an impossible way. The Central African Republic, for example, which spent money from international loans to hold a coronation for its short-lived emperor, as its bloodstained former dictator styled himself.

Fantasize a little. Suppose that a group of young officers in, say, Argentina, raised their hands in "Heil, Peron" salutes, announced a coup and stridently defaulted on that country's billions of international debt. What would happen? A media crisis, a couple of banks or so in bankruptcy, lots of money poured in from central banks. And after this useful if costly lesson? Give it a year or so, and those young officers, older and wiser, would beg to be allowed to rejoin the international fold. And, as happened time and again in the 19th century—a better model for what is now happening than the 1930s—they would repay all those once-defaulted debts.

It was John Maynard Keynes, writing about the 1931 crisis in money values, who saw the flaw in bankers' armor most clearly. Keynes wrote: "Lifelong practices [to maintain appearances and to profess a conventional respectability] make [bankers] the most romantic and the least realistic of men. It is so much their stock in trade that their position not be questioned, that they do not even question it themselves until it is too late." That's why voices like George Champion's are worth listening to when he declares that "management has to be held accountable." ■

The crisis at Baldwin-United concerns more than banks and stockholders. There are also the policyholders.

Is there enough collateral?

By Richard L. Stern

As Baldwin-United Corp. wrestles with the banks for survival, some of the 174,000 holders of its hot-selling, glittering product, its $4 billion worth of single premium deferred annuities now outstanding, are wondering how safe their investment is.

Well they might. They may be perfectly safe. But if things go badly for Baldwin, it turns out no one is exactly sure who has first dibs on a lot of Baldwin's subsidiary paper. Some $850 million of the assets backing the annuities are in that form. Much of the paper is backed, in turn, by the giant mortgages-and-municipal-bonds insurer, MGIC. And MGIC is also pledged to the banks. Baldwin continues to insist all is well, and as of Dec. 31 there was more than $229 million in surplus—"funds over and above the reserves required by law." True, the annuities are also backed by government bonds and notes, CDs and marketable preferreds like Cincinnati Bell. So, on the face of it, 90% to 92% of the annuity holders' money is absolutely secure.

Nonetheless, the whole situation could raise some questions in the minds of annuity holders. They laid out an average up-front payment of $23,000 for something that looked like an annuity but was actually a nifty investment package wrapping high-interest yields (12.5% to 14.5%) in a ten-year tax deferral scheme. Sophisticated, yes. Clever? Okay. But the salesmen assured the buyers the SPDAs were safe.

Approximately $643 million of Baldwin paper held by the annuities is in a subsidiary called Balunit. Balunit, aside from about $43 million in other investments, is mainly the holding company for MGIC. There also is Balunit preferred stock around, amounting to about $42 million, with a claim on the same assets. The problem is this: Only through a sale of MGIC can the banks recoup the $440 million they are owed for financing the MGIC acquisition. So, the banks and the SPDA-holders must look to the same collateral. But can it protect both? Estimates are that MGIC would have to be sold for some $1.126 billion to make everyone whole. "I don't think both the bankers and annuity holders can be paid in full," says Thomas Rosencrants, an analyst at Chicago-based William Blair & Co.

Alas, some fear MGIC might only be sold for $800 million or $900 million. A look at MGIC's recent 10-K gives you some idea why. A careful reader will discover that MGIC has been buying parent company stock, which has fallen from 50 to 12. A warning sign to a wary buyer.

Something not in the 10-K that would enlighten investors. To cover an increased loss ratio because of higher foreclosures, MGIC had to dip into its contingency funds to the tune of $24 million.

One bank representative has said privately the banks are hoping, if MGIC is sold for less than $1 billion, they can get their money before the state insurance commissioners realize what has happened to the SPDA holders, whom the commissioners are supposed to protect. Indeed, sources say, a major reason the banks agreed to a recent 90-day loan extension was that a bankruptcy judge might take more pity on annuitants than on the banks.

Linda Garner, the new insurance commissioner of Arkansas, where $2.8 billion of those annuities are domiciled, asked Baldwin on Apr. 11 who owns what, and Baldwin assured her that everything was A-okay. Garner says she thinks Baldwin can pay but won't be sure until she sees filings due May 2.

For the annuitants, there are only the company and insurance guaranty funds maintained by 29 states to look to if things get really rough. They have nothing akin to FDIC insurance.

Those state commissions are worth a look. A crazy quilt of 50 state insurance commissions with 50 sets of laws and 50 levels of competence govern the insurance industry, and the investor's fate would depend a lot on which state gets involved. Not all have guaranty funds, and not all of those that do will cover annuities. One that does not: Arkansas. A resident of Illinois, however, who bought a Baldwin annuity issued in Arkansas probably would be made whole by the Illinois fund—up to the legal limit of $100,000. Not so of a resident in California, with no fund backing insolvencies of annuities. California residents purchased slightly less than $500 million in Baldwin annuities. On the other hand, a Californian who was sold a Baldwin SPDA domiciled in Indiana is luckier, since that state does have such a fund. As you see, it gets complicated.

Most states that do have insurance guarantees have no reserve funds. They would assess other insurance companies writing business in the state. Indeed, there already are rumblings from a number of states that perhaps SPDAs do not meet the legal requirements of the insurance insolvency laws. Are they really life insurance? Or are they really an investment vehicle? After all, they were sold mostly by Wall Street brokers as investments. The question has sent authorities in Oregon, for one, flying to their attorneys.

Talk to top insurance executives and they will tell you Baldwin's problems underline a weakness of a system they have learned to live with. Many of the commissioners got where they are through political connections, not ability. And many of their staffs have shown equal incompetence. Baldwin's growth was unrestricted in most states, with the exception of New York—the best-regulated state in the country.

"There is no doubt in my mind that every one of those states had prior warnings about potential Baldwin problems," and "except for New York" they failed to take action to protect their state residents, says analyst Rosencrants. Of the $4 billion in Baldwin annuities sold in the last four years, less than $10 million was sold to New York residents.

The whole thing may end up by giving the insurance industry a bad name among investors. ■

State of confusion

Only a few more than half the states provide protection to annuity holders if an insurance company becomes insolvent. Even then, most impose limits on the coverage; and some may exclude single-premium deferred annuities.

State	Dollar Limits
Arizona	$100,000 for annuities, $100,000 in cash values/ $300,000 for all benefits
Connecticut	$100,000 in cash values/ $300,000 for all benefits
Florida	$100,000 in cash values/ $300,000 for all benefits
Georgia	$100,000 in cash values/ $300,000 for all benefits
Idaho	$100,000 in cash values/ $300,000 for all benefits
Illinois	$100,000 in cash values/ $300,000 for all benefits
Indiana	$100,000 in cash values/ $300,000 for all benefits
Kansas	$300,000 for all benefits
Kentucky	$100,000 in cash values/ $300,000 for all benefits
Maryland	To contract limits
Minnesota	$100,000 in cash values/ $300,000 for all benefits
Montana	$300,000 for all benefits
Nebraska	$300,000 for all benefits
New Hampshire	$100,000 in cash values/ $300,000 for all benefits
New Mexico	$300,000 for all benefits
New York	For policy terms
North Carolina	$300,000 for all benefits
Oklahoma	$100,000 in cash values/ $300,000 for all benefits
Oregon	$100,000 in cash values/ $300,000 for all benefits
Pennsylvania	Settlements or for covered claims
South Carolina	$300,000
Texas	For amount of covered claims
Utah	$100,000 in cash values/ $300,000 for all benefits
Vermont	$300,000 for all benefits
Virginia	$100,000 in cash values/ $300,000 for all benefits
Washington	Per policy terms
West Virginia	$300,000 for all benefits
Wisconsin	$300,000 for all benefits
Puerto Rico	$300,000 for all benefits

Source: National Association of Insurance Commissioners

Oil drilling is in the doldrums, and first-quarter oil company results tell why. But here's Texaco, still drilling as though oil prices had never slumped.

Texaco's single-minded boss

By Carol E. Curtis

JOHN K. MCKINLEY is chairing a meeting of his top officers with some visitors, and a slide of one of Texaco's drilling tracts off the shore of California flicks onto the screen.

"That's it," he exclaims to the darkened room in a hard-edged southern accent. He turns to the others. "That's what I want to do. I don't want department stores. I don't want a robots company or a copper mine. I want to drill more of those big oil tracts." His eyes gleam in the glare of the projector.

McKinley, chairman and CEO for 2½ years, at 63 is halfway through one of the most difficult tasks a chief executive can undertake. He has to turn around his almost unimaginably huge company—at $48 billion in revenues, it is the fourth-largest corporation in

the U.S. But big companies don't turn on a dime, and McKinley's task is made doubly difficult by the current turmoil in the oil business.

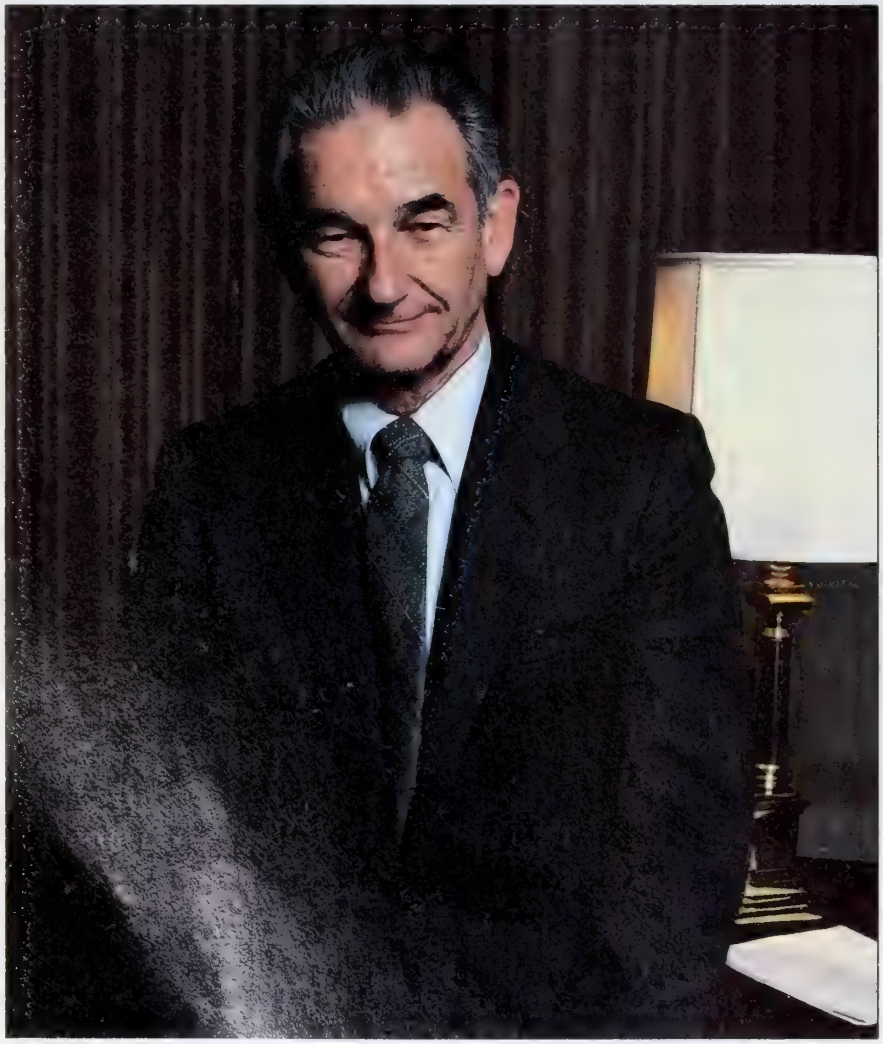
McKinley turns to the screen, his unprepossessing frame blotting half the light from it, and puts his hand on the image of the oil tract. His message is: Get out there and find oil, find it close to home. That's the way out of our difficulties.

McKinley is not normally a demonstrative man, but there is excitement in that hardy southern voice, even though the task has defeated other men and the problems at Texaco are deep-seated.

When the time drew near for longtime company architect and CEO Augustus Long to depart in the late 1960s, McKinley was merely head of the relatively obscure petrochemicals operations. But he caught Gus Long's eye. In the major reshuffling that took place at the top in 1970-72, McKinley emerged with the title of president.

However, long-apparent heir Maurice Granville emerged as CEO and chairman. Granville's eight-year tenure is widely, and delicately, described as a "caretaker" administration. Certainly he did very little to change substantially what Gus Long bequeathed to him: a vast, elaborate engine for pumping oceans of cheap, abundant crude downstream through an intricate maze of refineries, chemical plants and, most of all, a 50-state network of 40,000 gas stations that was easily one of the largest in the country. The whole system was a monument to the past, a past when crude oil was so cheap and profitable that nobody much cared whether refining and selling were profitable. The rule was: Get the stuff and move it. Fine for Gus Long's time, but not for the OPEC Seventies. Or the Eighties.

As early as the late 1960s, the company's Louisiana oil wells, then its primary source of cheap domestic crude, had begun to decline. But never mind. Through Aramco, Texaco had plenty of Saudi crude that cost as little as 10 cents a barrel to produce.



John McKinley of Texaco
"I want to drill more of those big oil tracts."

By the time Granville retired in 1980 and McKinley finally took over, Texaco had long since lost the respect of the rest of the oil industry and of Wall Street. It was desperately short of low-cost crude. "Texaco was left with a white elephant system consisting of teakettle refineries and no great market share," says Barry Good, Morgan Stanley's oil analyst. Too many of those 40,000 gas stations were in the wrong markets, he says.

Back at the meeting, the slide show ends. The Alabama-born McKinley is saying: "In the U.S. last year we reduced by 25% the manpower that we have involved in manufacturing." By manufacturing he means refining, and even that is hardly half of it. He puts the man he elevated to president of U.S. operations, 55-year-old marketing veteran James Kinnear, on the floor.

Texaco has closed down no fewer than 7 of 22 refineries. Three were in Europe. Some were longtime corporate sacred cows. All were chronic moneylosers. In the surviving refineries, work rules have been revamped. Four plants have been heavily modernized, with more improvements to come, close to $300 million worth this year.

Then come the gas stations. Texaco is down from 40,000 stations in the good old days to 18,500 now. The "investment stations"—where Texaco owns the real estate—have been cut more, by two-thirds, from 11,000 down to 3,000. The new Texaco station, of which there are 270 now and more coming, is not a local garage with a smiling "man who wears the star." It is a huge, impersonal self-service island. But competitive. The 3,000 investment stations today sell more gas than the 11,000 did two years ago: 48,000 gallons a month each, close behind industry leaders Shell, Arco and Exxon. They were also the first to charge extra to dealers when you used a credit card, a lead most others have since followed. No sentiment, just efficiency.

Kinnear's manufacturing operations are not making money for Texaco, yet. Last year he held his losses to $132 million in one of the most disastrous markets in years. McKinley: "When the industry returns to profitability," he says, "we'll make money, if anybody does."

Important as it is, manufacturing is not the main show. McKinley cannot stay away long from the biggest single problem he faces: a lack of sufficient crude oil to feed his remaining refineries. Since 1977 Texaco's net oil re-

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serves worldwide have dropped 47%, while the industrywide average drop is only 4%. A severe blow came when the Saudis nationalized Aramco's holdings—Texaco is one of the three largest partners. But that was not the only problem: In 1979, just before McKinley's accession, Texaco had to chop its stated oil reserves 25% and its gas reserves 16%.

Why? Because it turns out the oil and gas had never been there in the first place. Managers in the field had been able to look like they were doing well when they weren't. They put estimates on the books, and those estimates were never scrutinized. When McKinley took over, a good many heads rolled.

The incorrect estimates cost the company dearly. Its overestimates led it to enter into very large contracts with utilities in Louisiana to supply natural gas. When it drilled the wells, at great expense, the cost of the dry holes was only the beginning, because suddenly the company found it was simply unable to fulfill its contracts. So far, McKinley has had to make $1.7 billion in cash settlements to get Texaco off the hook. Real anger bubbles up to the technocrat's surface when McKinley recalls the signing of the last substantial check, in June, to Louisiana Power & Light for $587 million. It is one of the largest single checks written to one company for anything, anywhere. Serious mistakes no longer go unpunished at Texaco. Today, engineers independently confirm reserves. Regional managers, less easily misled, have been made responsible for judgments that once were left up to headquarters in White Plains, N.Y.

Many of the old mistakes have been corrected. But the central problem remains: Where will Texaco get its oil? Last year it cut its Saudi purchases in half. What had once been cheap oil was now priced well over the market. But the alternative was to buy the oil and lose money on it. The episode drives home the danger of Texaco's position. It still gets at least 30% of its oil from Saudi Arabia, 60% from overseas. Last year the "Aramco disadvantage" cost the company some $400 million, buying at $34, selling at $31. That's $1.50 a share, net, off earnings. Clearly, Texaco must develop new sources.

But where? Even now Texaco is exploring and developing in Angola and Indonesia. McKinley has lawyer Alfred DeCrane, 52, who heads the foreign operations, do a turn on the high earnings potential there. But it's clear McKinley is very aware that Texaco drills in such places at the whimsical sufferance of governments, and so foreign oil is not going to be the main play anymore.

Alternative fuels? To McKinley that means gas, period. McKinley is not kind to projects like Exxon's $6 billion Colorado oil-shale project, abandoned last year. "For the foreseeable future," McKinley sums up, ever the technocrat, "such projects are an excessively costly way to provide secure energy sources."

Texaco is fortunate in a backhanded way. The "caretakers" of the 1970s sat on their hands while many other big oils rushed to diversify. Most of the moves were dismal failures, a massive waste of corporate funds. By avoiding this mistake, Texaco husbanded resources it can use today in the search for oil.

Again and again, logic brings McKinley back to oil. He concedes that conservation has postponed the day when the world runs short of oil—but hasn't changed the inevitability. He is quick to point out that the oil business is still one of the best there is.

Meanwhile, there is hardly a cheaper company in the industry. If all of Texaco, aside from its oil and gas, were valued at zero, John S. Herold's Tom Tracey calculates that at $32 per share, investors would be paying just $2.35 per equivalent barrel for Texaco's oil and gas.

It's no wonder then that again and again McKinley's orderly, engineer's logic brings him back to oil. He concedes that conservation has postponed the day when the world runs short of oil—but hasn't changed the inevitability. He is quick to point out that the oil business is still one of the best there is—even in the U.S., where it costs an average of just over $10 a barrel to bring in new crude. At $30 a barrel, that's still a gross profit of close to 200%. Even with taxes and royalties, Texaco makes about $4.50 per barrel at the wellhead. Next to computers and pharmaceuticals, that makes oil one of the highest-margined businesses around.

In a dramatic break with Texaco's past, and far ahead of most of his international competition, he is prepared to spend vast sums to find relatively costly domestic oil at a time when oil prices are falling all over the world. He has something going for him. With the oil crisis hysteria subsided, and with oil less attractive as a tax shelter, drilling has declined by 58% in the U.S. Result: a drastic drop in drilling costs. Oilmen report that they can get 25% more for a drilling dollar today than they could a year ago.

Yet extensive drilling is a gamble, even if the cost of the gamble has lessened. Not everyone is convinced that there is enough oil to be found at low enough cost. "Frankly," says Bruce Lazier, who follows oils at Paine Webber, "the prospect of finding oil in the U.S. is very dismal." He means that a company of Texaco's size needs a discovery on the scale of Prudhoe Bay to reverse its reserve decline, and he thinks high hopes of that are unjustified.

Someone points out that problem to McKinley. The eyes flash. "We are up to 9.7 million acres of oil leases. Which is 35% more than we had in 1979. Just in the U.S.," he says. Last year, Texaco boasted the best success ratio for wildcatting in the U.S.: 43%. McKinley has already spent $210 million for leases in Alaska's Beaufort Sea, getting ready to hunt for another Prudhoe Bay there. The signs, he says, are good. He has joint ventures going with smaller independents everywhere in North America. He already has a major discovery in the Santa Barbara channel off the coast of California. That is where the oil tract is that he had admired up on the screen, and Texaco owns 35% of that play. "We've already got three wonderful wells there," he says, suddenly reaching for a map of the drilling area. The whole tract could produce 50,000 barrels a day. At $30 a barrel, Texaco's share would come to an estimated $190 million a year.

McKinley spent almost $2 billion on exploration and development in the U.S. last year, along with $2 billion elsewhere in the world. He's going to spend about the same in the U.S. again this year—in the face of deep cuts by other major international companies. Gulf, for example, cut spending by nearly 26% in 1982. Shell trimmed 12%, Standard Oil of California 19%.

Two billion dollars is an astonishing amount of money. It is as if the entire assets of American Motors were to be converted into North American holes in the ground and gathering networks for them in a single year. And he plans to keep up the pace. His drilling rigs are busier than ever. The outcome is still uncertain, but Texaco is really on the move at last. ■

Will We Have The Power To Sustain Economic Recovery?

By
Warren M. Anderson
Chairman of the Board, Union Carbide Corporation

Electricity—in adequate supply and at reasonable cost—is essential to a sustained economic recovery for America.

Electricity's reliability and efficiency are helping to spawn new industrial processes and products in the energy-conscious industrial sector. In the chemical industry alone, use of purchased electricity increased 23 percent between 1972 and 1980. In all U.S. industry, electricity's share of total industrial energy consumption rose from 23 percent to 33 percent in the same period.

Electrification Will Accelerate

This electrification of industry will accelerate as the economy begins to recover.

If our nation is to avoid short-circuiting economic revitalization, we must take the steps necessary to assure the long-term recovery of the electric system. That calls for rates for all classes of customers that reflect the actual cost of providing service. Keeping rates artificially low now means higher costs for everyone in the long run and threatens the financial integrity of the systems.

"The industry must be able to undertake programs that mean the lowest possible costs for all consumers in the future."

We must avoid the temptation to let the increased cost of providing electricity be borne disproportionately by industrial customers. By requiring industry to pay more than a fair share, we further undermine the nation's overall economic well-being.

Cost-of-service pricing, which includes a fair return to utility shareholders, will enable utility managements to sustain the quality of supply at the least cost over the long-term.

It is ironic that, as American i dustry in general is being criticiz for supposedly sacrificing long-te goals in favor of short-term resul we may be forcing the foundatio our industrial future to do just th

Utilities Look Ahead

Electric utilities have tended to take the long-range view. That farsightedness over the past cent has built for America the most eff cient, reliable and economical po supply system in the world. In re cent years, the industry's planni horizons have been extended ev further as lead times for new pla construction and new technology have steadily increased.

Right now, the electric utility industry should be increasing it investments in programs to mode ize and increase efficiency in existing plants, further reduce de

Warren M. Anderson is chairman of the board and chief executive officer of Union Carbide Corporation, one of America's largest diversified industrial and consumer products companies. Union Carbide, with 143 U.S. locations, has been a pioneer in the development of industrial energy conservation techniques and in the electrification of manufacturing processes.

dence on imported fuels, and elop new capacity to meet the ds of an expanding economy.

ergy Problems Not er

he recent easing of demand for ctricity, combined with increased plies of petroleum products, do signal an end to America's rgy problems. Both conditions in large measure caused by ere recession. A strong upturn ndustrial activity will quickly erse these conditions.

et financial constraints are forc- many utilities to defer or cel needed investments. The roximately $164 billion in capital enditures projected for the next years is the bare minimum re- red to keep the system intact. s amount could be difficult for a ncially weak industry to raise. he financial condition of the ctric utility industry has apparently improved somewhat recently. Some state regulatory commissions have authorized rates of return on equity investment that more closely reflect the cost of capital. Inflation and interest rates have dropped, and the general stock market recovery has brought utility share prices closer to the asset values they represent. Within the industry, cost-cutting programs have been effective.

But much remains to be done.

Improving Productivity

The industry must be able to undertake programs that mean the lowest possible costs for all consumers in the future. There must be an overhaul of the regulatory system that now causes inordinate delays in building more efficient generating plants.

The resulting increase in overall energy efficiency and self-sufficiency will in turn lead to improved productivity and a more competitive position for American industry in world markets.

Everyone will benefit from greater employment opportunities, a stronger tax base and a more secure America.

Warren Anderson

Warren M. Anderson

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New money is pouring into the mutual fund industry at the rate of $3 billion per month. Unfortunately, it's the trendy stuff that's selling best.

Category-crazy

By Barbara Rudolph

THESE ARE HEADY times for mutual fund managers. Money is virtually tumbling into their portfolios. Since January new sales have averaged $3 billion a month. Assets of all non-money-market funds now top $85 billion. That's a record, up more than 61% from the level this time last year. "Greed is returning," jokes Peter Lynch, vice president and portfolio manager of Fidelity Group.

And why not? The stock market is doing well. Interest rates are falling, so money market investors are moving their assets elsewhere. Millions of Americans are opening Individual Retirement Accounts, ideally suited for mutual funds.

But not all of the money is going for the tried and true. Some 20% of the industry's net new sales is moving into funds that are less than six months old. It's a kind of extension of the fad for new issues.

Why the change? It might be just a successful product positioning. Many of the popular new funds are geared to what the industry calls "categories" or "sectors." Translation: They limit investments to specific industries, like technology, or health sciences. This kind of fund is as old as the hills but was out of favor until recently.

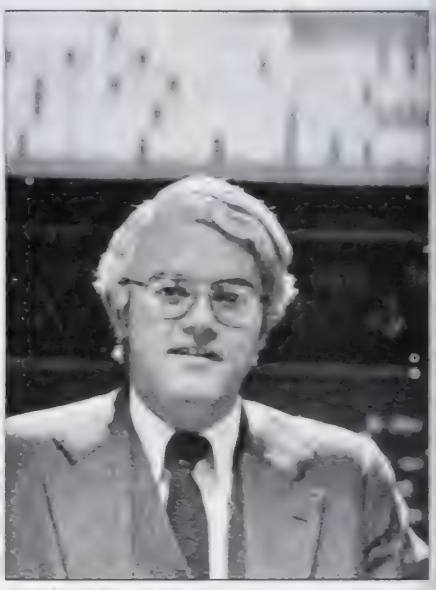
"In the Seventies, with inflation, new funds were income oriented, so we saw junk bond funds and option income funds evolve," says Richard Pallan, senior vice president of Putnam Management Co. "Now people want basic stocks, but not in a cross section of industry. They want to choose." Adds Fidelity marketer Jay DeMartine: "Playing a sector is like picking a stock. You feel you have a personal stake in the market."

Everybody to his own taste. There's even the Gaming Sports and Growth Fund, which invests only in casino and sports-oriented companies.

In Wall Street demand creates its own supply—and quickly. Last May Putnam came to market with Health Sciences Trust Fund, the first of the big category funds. Putnam expected to raise $100 million and pulled in $245 million. That was more than any other startup since the launch of Gerry Tsai's ill-fated Manhattan Fund, and it did not go unnoticed.

Responding quickly, competitors geared up several similar products. Merrill Lynch, in fact, set a new record last month when it opened its $836 million Sci-Tech Funds, which invests exclusively in technology stocks *(see table)*. Two other big category offerings are now in registration: J. & W. Seligman Communications & Information Fund will invest in media, cable TV and database companies, and Putnam's Information Sciences Trust will invest in computer equipment and service companies.

As these upstart funds flourish, however, old reliable names like Wellington haven't fared so well. The $558-million fund pulled in only $1.4 million in sales for January and February. Even worse, cash flow was a negative $7.8 million.



Fidelity's Peter Lynch
"Greed is returning."

Cycles come and cycles go, but investors seem always to make the same mistakes. All industries, even technology and health care, move in and out of fashion. The hot funds are in the currently fashionable industries, the ones that are trading at historically high earnings multiples. That's supposed to be the time not to buy but to sell. ■

Technology trap

Merrill Lynch thundered onto the technology scene last month, when brokers selling its Sci-Tech Funds raised more money than any startup fund ever. This $836 million portfolio, however, certainly won't be easy to maneuver into stocks that are often thinly traded—especially when there are lots of other well-heeled new buyers. Assets of Fidelity's Select Technology Portfolio, for example, jumped from $6.5 million last August to $208 million today. Is the field already getting crowded? One mutual fund marketer voices the hopeful consensus: "There is a snowball effect here because the term 'technology' turns people on." Indeed.

Fund	Assets (millions)	Launch date
Sci-Tech	$836	March 1983
National Telecommunications	$125	January 1983
Alliance Technology	$51	March 1982
Fidelity Select Technology	$208	July 1981
Explorer	$175	December 1967

A diversification mistake taught Lucky Stores what its business is all about.

Know your real strength

By Ellen Paris

CALIFORNIA's Lucky Stores, Inc., the nation's third-largest supermarket chain, has always had a clear vision of its main business. Since the mid-Sixties, Lucky (1982 sales, $8 billion) has lured shoppers into its 565 food stores by offering basic, no-frills shopping. "The only thing we've cared about getting was the customer's large weekly food order," says Chairman S. Donley Ritchey. That is why even today you don't see in Lucky Stores the fancy delicatessen or bakery sections that can be found at competitive California chains like Ralphs and Albertsons supermarkets.

Lucky went for the bargain hunters with an extensive selection of store brands and 28,000-to-32,000 square-foot markets it dubbed "discount centers." Backing its strategy with advertising that features shoppers gushing, "I saved $10.96 on my total food order at Lucky," it managed to combine rapid growth with margins, on the order of 1.7% net in 1978 and 1979, that were among the best in the supermarket industry.

So successful was Lucky in supermarkets, in fact, that in 1973 it decided to extend its retailing skills beyond food. Diversifying by acquisition, Lucky bought restaurants, drugstores, family department stores, fabric, automotive supply and women's apparel stores. On its own, Lucky opened specialty sporting goods and discount department stores. Today it is the nation's seventh-largest retailer, getting 47% of its earnings and 35% of its sales from nonfood businesses.

But all is not clover at Lucky. Last year's $92.2 million net income on $8 billion sales was off 3% from 1981's $95.4 million and below 1979's peak showing of $98 million earnings on only $5.8 billion in sales. Management, led by the 49-year-old Ritchey, who started at Lucky 32 years ago as a part-timer, has been reappraising the diversification.

It has been a humbling experience. Last June, after two years of red ink, Lucky sold its Sirloin Stockade restaurant chain—124 self-service steak houses—at a $4.6 million loss. "Acquiring that division was a mistake," admits John Lillie, Lucky's president.

Lucky's Ritchey and Lillie
The warehouse is the key to it.

"We simply didn't know how to operate them very well." Another mistake Lucky recently unloaded was 13 of its Washington, D.C.-area MEMCO discount department store sites. Lucky started GEMCO (called MEMCO in the East) in 1960 as a membership discount department store.

Today GEMCO has over 6 million members with 80 stores in four western states. But MEMCO's losses have overshadowed good performance by stores in Arizona, California, Nevada and Texas. Lucky went into the East in 1970 because, says Ritchey, "We thought GEMCO was running out of markets in the West." But there were not enough MEMCO stores in the metropolitan D.C. area to support a Lucky-owned warehouse. So goods had to be bought from outside wholesalers, thus eroding the already shaky margins.

But MEMCO may prove to be the most valuable error Ritchey and his managers ever made. Its problem—too few outlets to support a Lucky-style warehousing operation—was the same one that hobbled some of Lucky's other lagging diversifications. So 19 of the sporting goods stores were sold in the past year along with the restaurants and MEMCOs.

Ritchey and his crew retained Lucky's specialty retailing division with its high-margined retail fabric and automotive supply stores. That division, with 248 women's apparel stores, 405 automotive supply stores, 184 fabric stores and 112 family department stores, has the kind of numbers that respond to Lucky's warehousing and distribution strength. Specialty retailing last year contributed 27% of Lucky's total profits on only 8.5% of sales.

Management's conclusion: There's nothing wrong with diversification, as long as you use judgment. Lucky is expanding the $270 million (sales) automotive division with 76 new stores this year. With more and more people doing their own auto repairs, explains Ritchey, "We decided we wanted to be in a major position in that market, so we made a series of acquisitions a few years back and made it a large part of our business."

The food business? There will be a few changes: Lucky is building six new supersize stores this year (40,000 square feet) and adding a few bakeries and delicatessen sections, but only in affluent areas. "We still see our food business as the foundation, but we are trying gradually to shift the weight toward general merchandise," says Lillie.

Around Lucky's Dublin, Calif. (near Oakland) headquarters these days, management likes to admit that it has learned an important lesson. "We realized that we just can't do everything well," says Ritchey. But he might have said that Lucky learned just what it does do best: not retailing, but distribution, which, of course is what the supermarket business is really about. ■

How a global force took shape.

Two cubes, composed of many smaller cubes, symbolize Allegheny International's structure and stability. Consumer products companies, in blue, and industrial specialties companies, in silver, are joined in the Corporation and draw upon its financial and managerial resources.

The structure is now in place. Allegheny International has grown rapidly from a medium-size domestic metals company into a worldwide consumer and industrial products corporation. Today, we do business in 35 countries, with over 50,000 employees and sales of close to $3 billion.

This remarkable growth was based on a strategic plan: To achieve balance and stability through diversification and emphasis on businesses which are contra-cyclical within the Corporation; To expand our involvement worldwide in growth markets for utilitarian, work-saving consumer products and high-technology industrial specialties; To maintain equity positions in companies which have significant growth and earnings potential and divest those which do not.

Our consumer products companies and our industrial specialties companies both complement and strengthen each other. And all our companies benefit from Allegheny International's financi resources, and managerial and technical skills.

At Allegheny International, we have special skills to meet special needs everywhere on the globe. Our structure and our strategy have positioned us to meet those needs as they grow in the decades ahead. As they grow, so will we.

ALLEGHENY INTERNATIONAL

SPECIAL SKILLS FOR SPECIAL NEEDS.

The SR-71, the world's fastest, highest-flying production plane, uses high-technology specialties from Allegheny International.

SPECIAL SKILLS IN WORK-SAVING CONSUMER PRODUCTS

Around the world, Allegheny International companies market work-saving appliances and products for the home, kitchen, lawn and garden, as well as products for personal grooming, sports and fitness. Brands such as Sunbeam, Oster, Wilkinson Sword, Northern Electric and True Temper are famous for quality.

State-of-the-art kitchen help, from Sunbeam, Oster and Wilkinson Sword. Allegheny International is the world's largest small appliance company.

Their products range from state-of-the-art food preparation appliances, such as food processors, to electric blankets, camping equipment and golf club shafts.

In Europe, the brands Rima and Rowenta hold major shares of the markets for products ranging from mixers, electric frypans and coffee makers to hair dryers and irons.

A tremendous market for all of these brands promises to grow even larger as socio-economic trends—such as the increasing number of working women and single-person households—accelerate the need and demand for new, electric-powered work-saving kitchen devices.

SPECIAL SKILLS IN HIGH TECHNOLOGY

Allegheny International companies are meeting the needs of such advanced-technology industries as electronics, robotics, and aerospace and defense.

For example, our system and equipment help make more electronic microprocessor chips than any other system in the world.

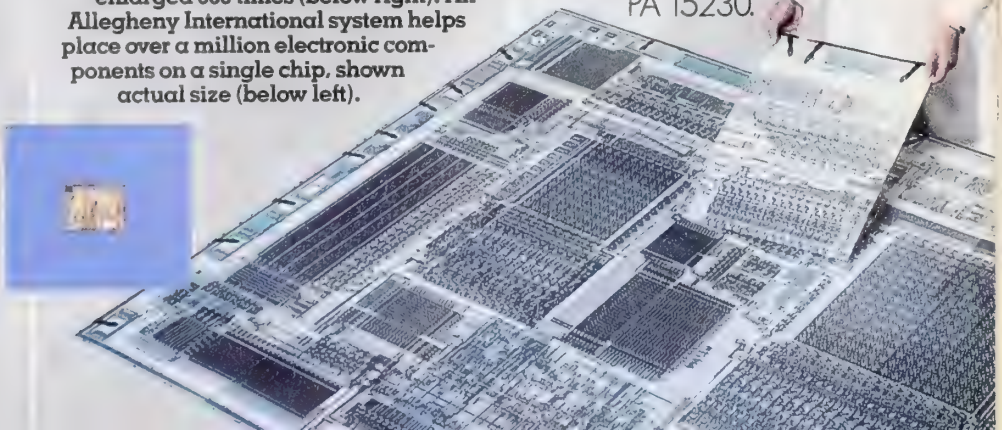
Our robots are already performing a multitude of industrial tasks. For instance, our computer-controlled 5-Axis welding robot is helping to produce the U.S. Army's new XM-1 tank.

For aerospace and defense, Allegheny International companies supply specialty metals and electronics for jet engines, rocket engines, missiles and spacecraft.

Allegheny International is also a major supplier of titanium and specialty alloys for the Boeing 767 and 757, the world's most advanced commercial airliners.

Our sophisticated fire detection and suppression systems are used around the globe to protect ships, planes, oil rigs, power stations, computer centers, pipelines and hospitals.

For more information, write us, at Box 456 B, Two Oliver Plaza, Pittsburgh, PA 15230.



This model of a microprocessor chip is enlarged 300 times (below right). An Allegheny International system helps place over a million electronic components on a single chip, shown actual size (below left).

In a deep recession, women spent billions on expensive fripperies—for more than superficial reasons.

The Cleopatra syndrome

By Subrata N. Chakravarty

STROLL DOWN San Francisco's chic Union Street. For-rent signs decorate a dozen closed shops. The recession has ravaged the health food stores and cheap restaurants. But where once just one store sold intimate wear for women, several now do—and they're doing very well. It's the same all over the country. Victoria's Secret. Sub Rosa. La Petite Coquette. Wife-Mistress. Those are some of the most prosperous, recession-proof businesses around. They're selling underwear, of course, but they're also selling sensuousness, fantasy and desirability.

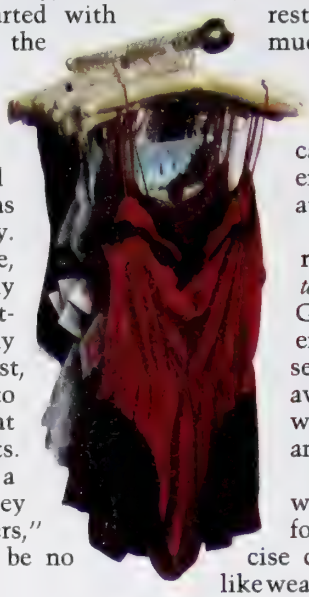
To put it bluntly, they're selling sexiness.

It sells, too. Maybe to the tune of $5 billion or so a year at retail prices, and people see growth. "There has been an enormous change in the industry over the last three or four years," says Beatrice Coleman, president of Maidenform, Inc. "There is a boom in the fashion end of the business."

"Underwear" long ago became "lingerie," of course. But now "girdle" has become "shapewear." Fad and fashion, as distinct from need, account for 45% of all "intimate apparel" sales, as opposed to only 5% five years ago. Maidenform, which used to sell nothing but functional brassieres, now makes 85% of its sales in fashion underwear of various types.

The blatantly sexy factor in the undies business used to be Frederick's of Hollywood, whose advertising intrigued a generation of American males. But Frederick's actually lost ground in the recession; the sultriness typical of Frederick's appeals mainly to customers with household incomes of $25,000 or less a year, those hit hardest by the recession. Fashion manufacturers aiming at richer customers have fared much better. So much so that the business has attracted some seemingly unlikely competitors: big, family department stores with lingerie-only catalogs; Spiegel, the mail-order house; and even stodgy old U.S. Shoe.

Sexy lingerie was around long before Moll Flanders hit puberty, but the current enthusiasm started with bra-burning. Back in the 1960s, says Jack Cassidy, president of Lily of France Marketing, a subsidiary of Bestform, brassieres became a a symbol of all that was seen as wrong with sexist society. They were restrictive, cumbersome, drab, overly structured, uncomfortable apparel meant only for women. In protest, some women decided to do without the bra. That began a revolution of sorts. "Imagine the impact if a whole generation said they wouldn't eat hamburgers," says Cassidy. "There'd be no McDonald's."



The industry languished. The bra and other undergarments did serve necessary functions, but women began to demand more than function. They demanded style and comfort, and Lily of France, Maidenform and others responded with more attractive products. Cassidy hired Rudy Gernreich and John Kloss to design brassieres that were sheer, sexy, and colorful as well—and made a woman look as if she weren't wearing one. "The bra became a fashion accessory," Cassidy says. "We're in the fantasy business. We made lingerie fun."

It paid off. Lily of France grew from sales of $3 million (at retail) in 1972, to over $80 million in 1982, while Maidenform went from $90 million (at retail) to $250 million. Sales of Playtex' traditionally styled bras and girdles, on the other hand, moved haltingly.

With markups of over 100%, intimate apparel has long profited department stores. But basic colors, white and beige, used to embarrass stores striving for fashion. Now, thanks to new fabrics and dyes, lingerie has been rescued from store drawers. Macy's main New York store now devotes over 35,000 square feet to intimate apparel, displayed in boutiques with names like "For His Eyes Only."

Department store catalogs began to present their wares with a frankness previously available only in naughty magazines. New York's trendy Bloomingdale's led the way with an innovative 1976 catalog entitled "Sighs and Whispers," featuring models photographed in an atmosphere redolent of sex and sensuality. It was followed by Macy's, Bullock's, even Saks Fifth Avenue. After a decade of all-too-explicit sex, the nuances of fabric, color and texture seemed to restore the mystery. Not too much mystery, of course. Nipples show through the gossamer-thin brassieres modeled in the catalogs, for example. But enough goes unseen to create a sense of allure.

"Lingerie is an accessory to sex," says *Cosmopolitan* Editor-in-Chief Helen Gurley Brown. "As women have become more assertive sexually, sex is very available. This is what you wear to take off to seduce and appeal to a man."

Sexy underwear has given women something to strive for in their diets and exercise classes. "Lingerie is just like wearing jewelry," says Brown. "It's a way to show off what you have, to show how pretty you are." And, like jewelry, intimate apparel has now become a gift item, spawning a number of companies, like the highly successful Victoria's Secret *(see box, p.79)*, specializing in advising bewildered males on the products that will best please—and fit—their ladies.

The number of adult women in the work force grew from fewer than 30 million in 1972 to 44 million in 1982, adding billions of dollars to their disposable income. Those women have willingly spent part of their new money on pretty underclothes. Many feel a

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BUT COULD OUR PEOPLE ACHIEVE IT?

MAZDA'S 126.4%

Anyone who has watched Mazda over the past seven years has witnessed something out of the ordinary.

An extraordinary increase in productivity.

Productivity has risen 126.4% as production volume climbed from 19.3 vehicles per employee in 1975 to 43.7 vehicles in 1982.

This dramatic increase was our solution to the problem of gaining control of production costs which began to spiral rapidly upward during the mid-'70s.

Increased productivity also allowed us to satisfy a growing demand for our products in markets around the world. In CY 1982, this demand thrust Mazda above the 1.1 million-unit mark in production, and once again made us the third-largest automaker in Japan.

By helping to design work motion charts, our people are making assembly line operations more efficient.

A MAJOR REDUCTION OF INVENTORY.

Our plan to increase productivity was vast in scope. Yet, in essence, it was but an effort to reduce costs while continuing to produce high quality automobiles in the shortest possible time.

Our *Operation 50* program is one example of this effort. It worked to reduce our inventory of in-process production parts and materials by 50% over a three year period. And continuing efforts have resulted in even further reductions as inventory has been trimmed from 6.8 days supply in 1975 to only 1.8 days in 1982.

Inventory reduction resulted in a tremendous savings in expenses. It also revealed snags in the production process which would have otherwise remained hidden. By eliminating these snags, we were able to achieve a significant improvement in both the flow of production and the reliability of production-related equipment.

Mazda reduced inventory 73% since 1975.

A NEW PRODUCTION SYSTEM.

Inventory reduction ushered in our new system of synchronized production.

We no longer maintain large inventories of parts and materials. Rather, we bring these forward only as we need them, and schedule them to arrive at our production lines just in time for the next step in the manufacturing process.

This kind of synchronization demands tight coordination between our various divisions, as well as between us and our suppliers and their subcontractors. In fact, all of our domestic suppliers and subcontractors have met our standards for in-house quality control and now deliver directly to the production lines without any ongoing inspection on our part.

AUTOMOBILE PRODUCTION IN JAPAN IN 1982	
Maker	Units
1 Toyota	3,144,557
2 Nissan	2,407,734
3 Mazda	1,110,164
4 Honda	1,020,078
5 Mitsubishi	969,445
6 Suzuki	603,153
7 Subaru	513,506
8 Daihatsu	464,245
9 Isuzu	404,871
10 Hino	61,445

Mazda is Japan's third largest automaker.

PEOPLE PROVIDED THE SOLUTION.

Our people, workers and management alike, figure prominently in our effort to increase productivity.

Since 1975, they've contributed more than *six million* suggestions to improve productivity and quality—and more than 50% of their ideas have been adopted. Nearly 2.6 million suggestions were generated in 1982 alone. More than were received by any other automaker in Japan.

Sixteen of our people were also selected to spearhead Mazda's *MM Operation,* a program which finds them working closely with production management in an ongoing effort to spread proven productivity methods throughout the production system. And their participation has paid dividends, both in terms of improved productivity and higher quality standards.

SOLUTION

A MORE PRODUCTIVE FUTURE.

Our goal is to create a production system that is capable of responding rapidly to shifts in market demand. And we've already made considerable progress toward this goal.

For example, our new Hofu plant, which began operation in September 1982, is capable of simultaneously assembling nine different automobile body types in three different model variations. And with 155 computer-controlled robots, Hofu clearly represents the state-of-the-art in terms of automation and production flexibility.

Robots improve productivity and also relieve our people of the more odious production tasks.

But while automation has become increasingly important to production operations, our people will continue to play the essential role.

The people at Mazda are committed to producing the highest quality products at the lowest possible cost, and in the shortest possible time.

And our 126.4% solution to the problem of controlling production costs is powerful evidence that this commitment is being fulfilled.

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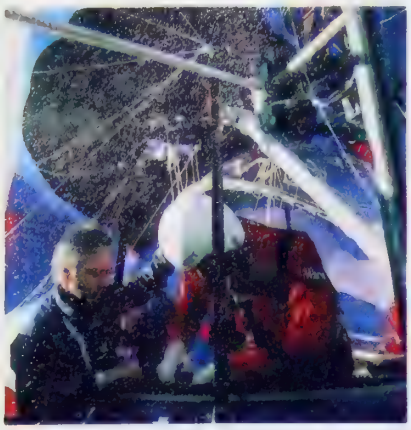


Julian Nott makes final pre-flight checks.

Nothing inspires a world record holder more than the capture of his world record.

In 1979, it happened to Julian Nott.

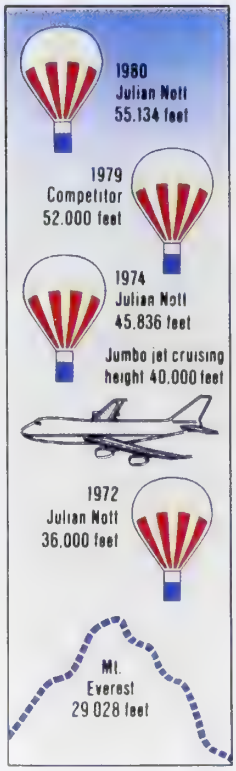
A competitor soared to 52,000 feet in a hot air balloon, exceeding Nott's 1974 record by more than 6,000 feet.

But Julian Nott refused to accept defeat.

Working with a team of dedicated experts, he spent 13 months meticulously planning to regain the record.

If he was to succeed, he would have to pilot his balloon into the top ten percent of the atmosphere. A barometric desert where freezing temperatures, lack of oxygen and virtually nonexistent air pressure pose a constant threat to both man and machine.

Every piece of equipment for the ascent was chosen with agonizing attention to detail.



The record since 1972.

The most advanced technology and materials were incorporated.

For example, the pressurized cabin was constructed of the very latest composite plastic, effecting a weight saving of nearly 80 percent over conventional materials.

One vital piece of Julian Nott's equipment, however, remained unchanged from his 1974 ascent.

His watch. A Rolex Oyster. "It came under the same close scrutiny as everything else," remarked Julian, "but, personal preferences aside, its inclusion was never really in doubt."

In 1980, in the early hours of a late October morning, in Denver, Julian Nott and his hot air balloon *Innovation* began the record-breaking attempt.

Using his Rolex Oyster to enable him to always match the computer-designated optimum rate of climb, he rose to a height of 55,134 feet. A new world record.

The world's top balloonists are now turning their attentions to the circumnavigation of the earth.

Julian Nott is one of them.

"Of course, choice of equipment will be crucial for this trip too," he says. "But I'll be very surprised if the first watch to go around the world by balloon isn't a Rolex." He smiles. "Even if it's not mine."

ROLEX

The Rolex GMT-Master Oyster Chronometer. Available in 18kt. gold, stainless steel or steel and gold combination. All with matching bracelets.

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need to buy such products both as a reaction to the very conservative clothing they feel impelled to wear on the job and as personal reassurance against the resentment of male colleagues who occasionally have questioned the femininity of female competition in the workplace. "In a period of confusion as to women's roles vis-à-vis men and the work situation, there is a great interest in maintaining femininity in undergarments and private clothing," says Laura Sinderbrand, director of the design laboratory at New York's prestigious Fashion Institute of Technology.

Off the job it is also of interest. Lounge wear, intended for wear when alone or for intimate entertaining at home, is a large and growing part of the intimate apparel business. One who has done very well at it is Josie Cruz Natori, who gave up a successful career in 1977 as an investment banker for Merrill Lynch to design elegant and luxurious lounge wear and lingerie. What began as a single rack of clothes in Natori's living room has now turned into an exclusive label that generates lingerie and lounge wear sales of over $10 million at retail. Natori's target customer is the professional working woman of above average income. "If you have to be serious during the day and prove yourself all the time, you want to gratify yourself in the evening," she says. "So you can go home and be Cleopatra."

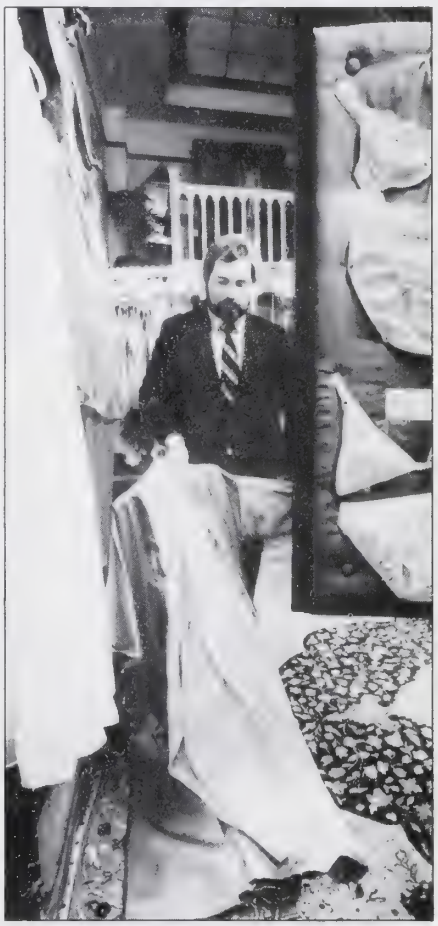
That may be the simplest explanation of all for the boom in the fashion end of the intimate apparel industry. It is a means of self-gratification, of indulgence, of making a woman feel beautiful, sensuous and desirable, of simply feeling good. "A beautiful nightgown is an indulgence," says Carole Hochman, president of Christian Dior Intimate Apparel. "Other than a mink coat or a diamond necklace, what else can make you feel as good?" Or do it for as little. The price of luxurious underwear is within the reach of many more than can afford a new dress or a bottle of perfume. "We're selling fantasy, hopes and dreams," says Mary McMahon, vice president and merchandise administrator of Macy's intimate apparel division. "We call them body cosmetics. We want to make her body look as beautiful as cosmetics make her face."

Anybody can see your outerwear, but a woman chooses who sees beneath. That makes lingerie perhaps the ultimate means of establishing one's individuality. As the economy picks up, the marketers who sense what women want beneath their workaday wear will do very well indeed. ■

Secret success

The boom in women's lingerie has made a retailing success for Roy Raymond, 36, founder (in 1977) and president of Victoria's Secret in San Francisco. The six-store chain of boutiques has doubled its sales each year, to $7 million in 1982. Tiny by retailing standards, but profit margins are excellent, reportedly 10% to 12% pretax. Victoria's Secret reaches affluent customers around the country through its lavish catalog.

Raymond, a Stanford M.B.A. with a bachelor's degree in motivational psychology, was a marketing manager for a wine company before he and his wife spent $50,000—most of their savings—and $30,000 of borrowed money to open the first store and publish the first catalog. "I was frustrated and embarrassed at trying to buy lingerie for my wife in a department store setting," Raymond says. "I used to joke about it, and I began to notice that men, at least, would kind of nod their heads, as if they had had the same experience. Something in the back of my mind said, 'Aha! This really shouldn't be such an unpleasant experience.' "



Victoria's Secret President Roy Raymond
The product is fun.

Victoria's real secret lies in catering to male as well as female customers. Warm colors, antique furniture and tactful clerks all work to create a less intimidatingly feminine ambience than you might expect in a place selling fancy lingerie and other bedroom wear. "People should be able to enjoy buying lingerie," says Raymond. "The product is fun, and the whole experience of choosing it and buying it should be enjoyable for both men and women, either shopping individually or for a couple shopping together."

The catalog, which fetches half the chain's revenues, also aims at both sexes. It explains how to size and order goods and offers a hotline number for help. Lavishly illustrated with photographs of scantily clad models, the catalog nevertheless seems sensuous and romantic rather than overtly sexual. "Elegant," Raymond calls it.

Raymond still runs the chain, but he sold it last year, for stock worth more than $1 million, to The Limited, a chain that owns Lane Bryant. Raymond and The Limited will open six new Victoria's Secret stores before June.

The idea has attracted competitors, including Intimique, a catalog owned by U.S. Shoe. The best known, of course, is the original catalog marketer of racy lingerie and clothing, Frederick's of Hollywood, hard hit by the recession because of its less affluent customers. But Frederick's has created a new division with its own chain of stores and a new catalog, both called Private Moments. Aimed at richer customers and also intent on helping men, Private Moments discreetly ignores identification with Frederick's of Hollywood, whose products seem a bit outré to many higher-income shoppers. Its name aside, the Private Moments catalog is almost a mirror image of Victoria's Secret.—S.N.C.

Federal money is, oh, so addictive. Public television is suffering withdrawal pains, and inflicting them on its viewers.

Kicking the habit

By Jeff Blyskal

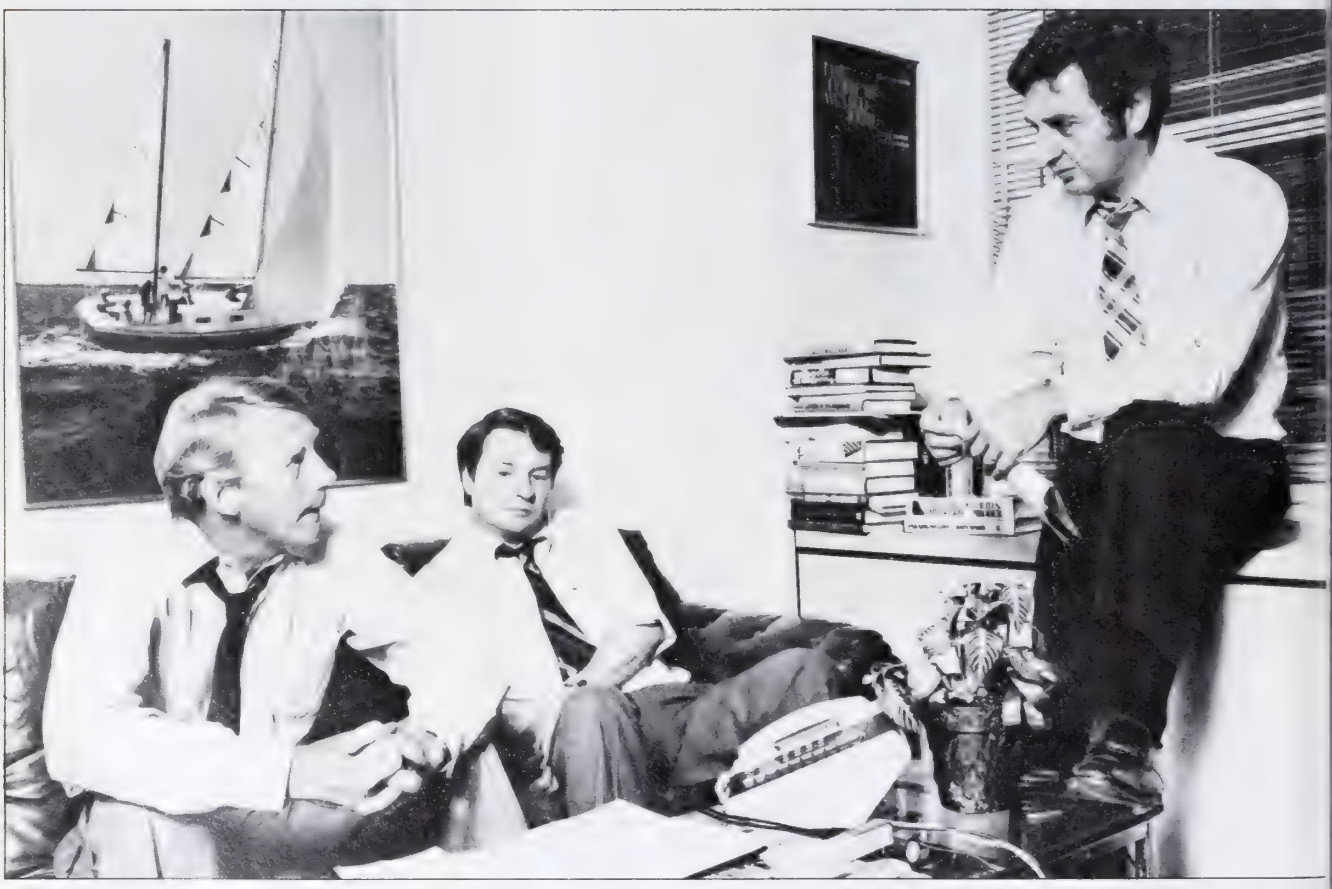
TELEVISION HEADACHE number nine: banks of telephones, a tote board. Suddenly, a face appears and pleads for money: Reaganomics and federal funding cutbacks, it seems, threaten public television's very survival.

Oh, come on now. The public broadcasting system stations' total income grew by 16.4% over the past two years, to a record $677 million in 1982. And while the commercial networks are losing viewers, PBS' audience share has more than doubled, to 5.3% since 1979. Yet the knee-jerk complaining continues. "The real problem," says an executive at one major PBS affiliate, "is that there are too many people around here who do too much crying about poverty."

This bellyaching is an example of the addictive power of federal money, more than $780 million to subsidize public TV since 1969. Through the Corporation for Public Broadcasting, Washington provided $115 million for public TV in 1982, 17% of total revenues. This handout will be slashed by $24 million in 1983. That's what the commotion is about.

Consider public television's total revenues, however, and the government move amounts to a mere 4% budget cut. PBS got another $526 million last year from nonfederal sources. Among them: individual member pledges ($118 million), state and local governments ($180 million) and corporate underwriters ($79 million).

What's more, the reduction in government support comes at a time when public television's ability to stand on its own is growing. Viewer contributions are growing at an average annual rate of 20%, thanks to bigger audiences attracted to better programming. PBS, after all, is no amateur production operating out of your neighbor's garage. Drop in on the popular *MacNeil/Lehrer Report* being taped in Studio 2A at New York station WNET. There, technicians are putting together—without a hitch—a program involving satellite links with stations in Washington, Detroit and



Robert MacNeil, Jim Lehrer and Executive Producer Al Vecchione
Quality programming will attract needed financing. It's bringing MacNeil/Lehrer $10 million from AT&T.

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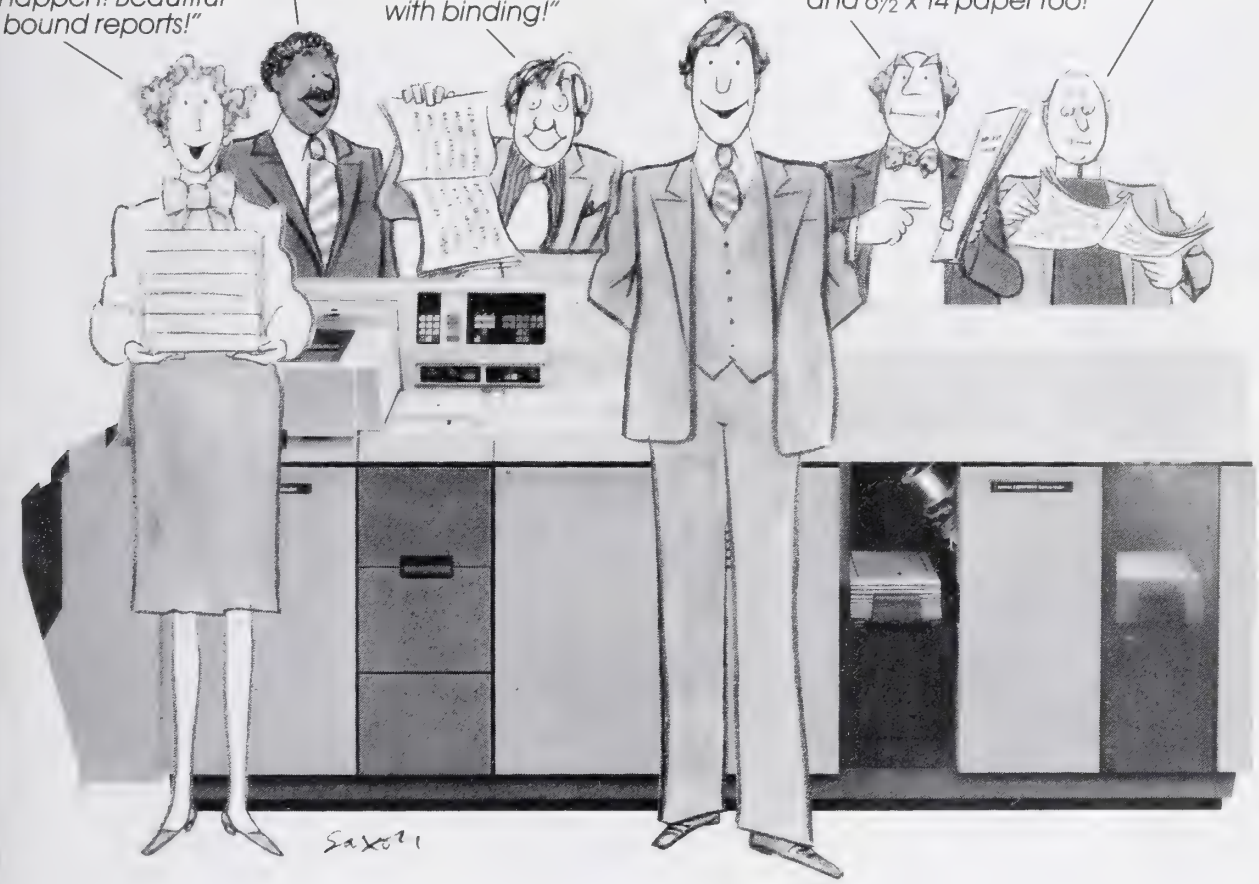

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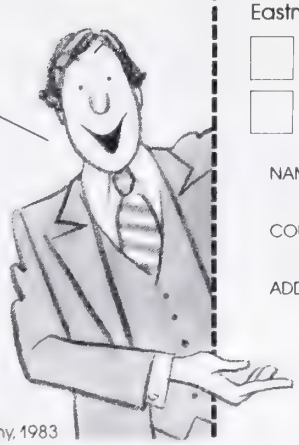

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Sesame Street's *Big Bird*
Potential for bigger bucks?

Salt Lake City. PBS is the only broadcast network with its own system of transponders on the Westar IV satellite. "We sit on an enormous facility, and there's a lot of opportunity," says Robert MacNeil.

Including legitimate opportunities for making money. Last month, for example, PBS and Merrill Lynch launched a joint venture that will broadcast coded videotext via satellite over the narrow horizontal band you see when your TV picture rolls. In addition, PBS and its local affiliates are already using their studios and satellite for teleconferencing, as well as leasing transponder time for data transmission. Together, these businesses generate $1.5 million a year.

That only scratches the surface. PBS President Lawrence Grossman sees good revenue potential for both projects. And there's another bright hope on the drawing boards. It's called PBS Cable, a pay-program service that could someday produce a good flow of new operating income.

MacNeil/Lehrer exemplifies the growing value of corporate underwriting. Networkwide underwriting is up by 75% since 1978. Why? Better programming and bigger audiences again. This year AT&T will contribute $10 million—a one-donor record—to make *MacNeil/Lehrer* the first one-hour prime-time news program.

Then there is advertising. In a congressionally authorized experiment, some PBS stations are running two minutes of commercials and "enhanced underwriting messages" at the beginning and end of half-hour programs. This has the potential for becoming a major source of income. Public television, of course, cannot compete with networks on audience size (2 million to 4 million for a top prime-time show, vs. 30 million to 40 million for a top show on commercial television). But, as magazine publishers learned years ago, targeting a select segment of the population is good, not bad. Just how much money can PBS expect to earn? A CPB study estimates as much as $77 million.

New video technology provides opportunities, too. PBS already sells cassettes of many programs, and this market promises to grow. Then there's cable. When a city is wired, the cable system must carry all existing channels, and that gives the local PBS affiliate a clearer, more accessible signal.

Foreign television is helping PBS, too—with cost-splitting coproduction. PBS and Britain's Granada Television, for example, shared in the $10 million production of *Brideshead Revisited*. And look at *The Brain*, a more complex example of wheeling and dealing. Jointly developed by WNET and television networks in Japan and France, this $8.5 million project will create an eight-part TV series, as well as a trade book and textbook.

There might be more money in licensing. Companies like CBS' Gabriel Toys and J.C. Penney, for example, sell close to $200 million worth of *Sesame Street* products a year. They pay the standard 5% royalty to the nonprofit producer, Children's Television Workshop. That cuts production costs and thus flows indirectly to PBS through decreased program charges. But toymakers don't pay a dime to promote this merchandise, a cost savings worth millions. Instead, PBS does de facto advertising, for free. What a way to run a network.

The situation is much the same when it comes to talent. Take the *Cosmos* series, produced by KCET of Los Angeles. A grant from Atlantic Richfield and the sale of foreign broadcast rights helped pay most of the $8 million production costs. But host Carl Sagan also profited from a million-seller *Cosmos* book. Of its roughly $2-per-copy royalties, he and others got an estimated $1.50, while something like 50 cents went to KCET. Similarly, financial commentator Louis Rukeyser commands lavish lecture fees as a result of broadcast exposure. With a closer focus on the bottom line, future PBS negotiators should have more leverage when dealing with on-air personalities.

Maybe PBS should be grateful for the federal cutbacks instead of crying poor mouth so much of the time. ■

What will the post-AT&T world be like for local phone executives? Exciting, if they behave like Al Gleason.

Dial 0 for opportunity

By Michael Cieply

THE IMPENDING BREAKUP of American Telephone & Telegraph has given rise to much solemn comment as to how utility managers will henceforth have to step lively to reap the manifold opportunities in the new world of telecommunications. Yet real entrepreneurs like Alfred (Al) Gleason were already hard at work when the AT&T split was announced in early 1982.

Al Gleason? He's the 53-year-old chairman of Pacific Telecom Inc., a $341 million (revenues), 154,000 hookup, Vancouver, Wash.-based, rural phone company, which is 90% owned by Pacific Power & Light. "I used to keep myself humble," quips

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Pacific Telecom Chairman Al Gleason
Making hay while Bell lumbered through the courts.

the whimsical Gleason, "by saying that AT&T is 80% of the business, and we're one-half of 1% of the remaining 20%."

With speed and daring Gleason has made his backwater utility the 48% owner of the country's second-largest independent phone manufacturer in the last year. How? Follow this if you want to see how Bell operating companies—which will be barred from manufacturing phone equipment yet free to pursue a host of new ventures (FORBES, *Aug. 2, 1982*)—will have to behave once they become independent in January. While Bell was lumbering through the courts, Gleason's PTI paid $5 million in late 1981 for a 20% share in Comdial, an obscure startup in San Francisco that laid claim to a moneylosing semiconductor operation and an electronic dial technology that makes digital-tone out of rotary phones—still 47% of the U.S. market and almost 97% of Europe's—without junking serviceable electromechanical switching equipment at the central exchange.

That was good news by itself for PTI, which figured to raise its line usage by offering cheap access to computers or discount carriers like MCI. Then, in spring 1982, General Dynamics put its Stromberg-Carlson and ATC telephone equipment manufac-

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*Based on sticker prices of comparably equipped vehicles in EPA mid-size class excluding other Chrys

turing units up for sale. Noting that GD had lost its shirt in the jam-packed PBX market but profited nicely on plain old phone sets, Gleason sank another $25 million equity into tiny Comdial, which matched the amount with a bank loan, and closed a hurried deal for the $157 million (1982 sales) phone-making operations, minus the high-line losers.

The enviable result: Comdial paid its bank debt with profits and new equity in a short six months. Comdial shares have more than tripled, from 6 to 23, since August. And the nimble Gleason's PTI owns almost half of a major supplier to the Bell Phone Stores in a market that should triple over the next two years. PTI shares also have increased, from 6 to about 22, in the last 12 months, with a respectable 13 multiple and the highest market-to-book value among telephone independents.

Fast work, and nice work. But Gleason, a 34-year utility veteran who worked his way up from the mailroom of the old California-Oregon Power Co. (now absorbed by Pacific Power & Light), had compiled a track record long before 1982. PTI's earnings have grown at a 22% compound rate for five years, and last year its return on equity was 18%, with debt at 40% of capitalization.

The company got its start 28 years ago in the Columbia River fishing village of Ilwaco, Wash., where banker Norman Howerton and family doctor Lewis Neace got tired of muddling along with 16-party lines. Instead of complaining, the pair sold stock to family and friends, thus building by 1973 a miniconglomerate called Telephone Utilities from a collection of mom-and-pop companies that were ignored by Bell. Meanwhile, Gleason, who made his mark by goading Pacific Power & Light into marketing its huge coal reserves for added profit (FORBES, *Oct. 27, 1980*), was charged with disposing of two phone companies that had come to PPL with a power acquisition.

Shrewdly, Gleason spotted those companies as "little gold mines" because scattered rural properties have high toll use. Why sell? Instead, he urged PPL to beef them up by acquiring a majority interest in Telephone Utilities, rechristened Pacific Telecom, in 1982.

"I fell in love with it," confesses Gleason, who resigned a Pacific Power staff vice-presidency in 1977 in favor of a modest hutch at PTI headquarters in sleepy Vancouver. In 1979 he persuaded PPL to acquire for $210 million RCA's Alascom—a tiny version of AT&T that provides long-distance and local communications in Alaska—and then horse-traded Telecom shares to the parent in exchange for the property. Alaskan toll traffic grew 23% to 25% annually throughout the recession—even to support the $90 million satellite Alascom launched last December. Moreover, PTI has managed to gain from the dread "bypass" phenomenon by helping to build and service Arco's private communications network.

To date, Gleason has invested $60 million in a scattering of Comdial-like startups, with another $125 million available if PTI stretches its debt ratio to the 50% level common among phone utilities.

Where could that string of investments lead? Gazing down at the lazy midday traffic on Vancouver's Main Street, Gleason casually mentions that Muzak was slowing down when Westinghouse acquired the music packager along with Teleprompter in 1981. "We have a complete recording studio," adds Gleason, broad-beamed and solid as a football guard. "And our satellite footprints all 50 states." His phone company has no current plan to compete, adds Gleason, "but that could change tomorrow. Maybe Westinghouse won't measure up." Whoever called utility managers sleepy never met Al Gleason. ■

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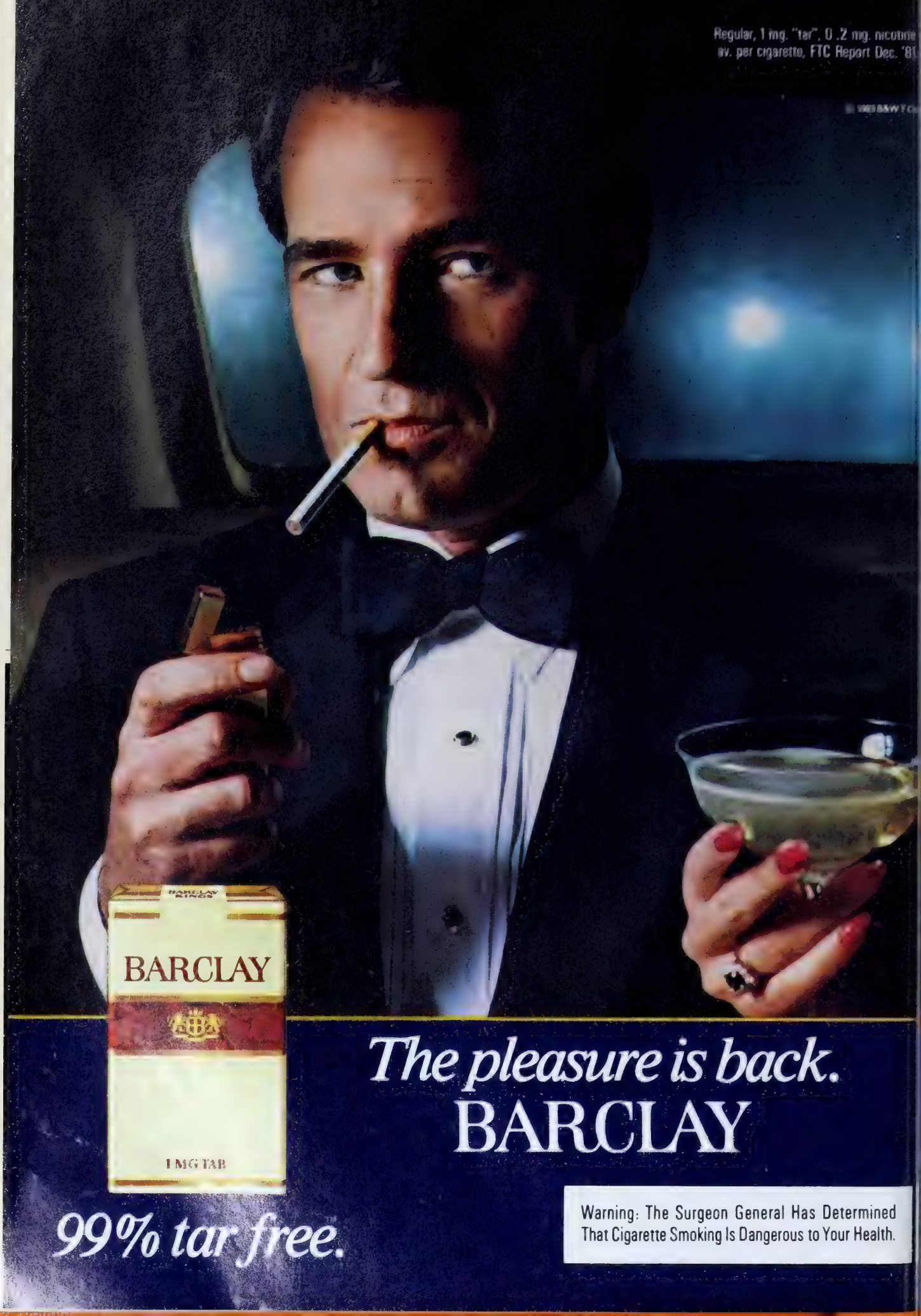
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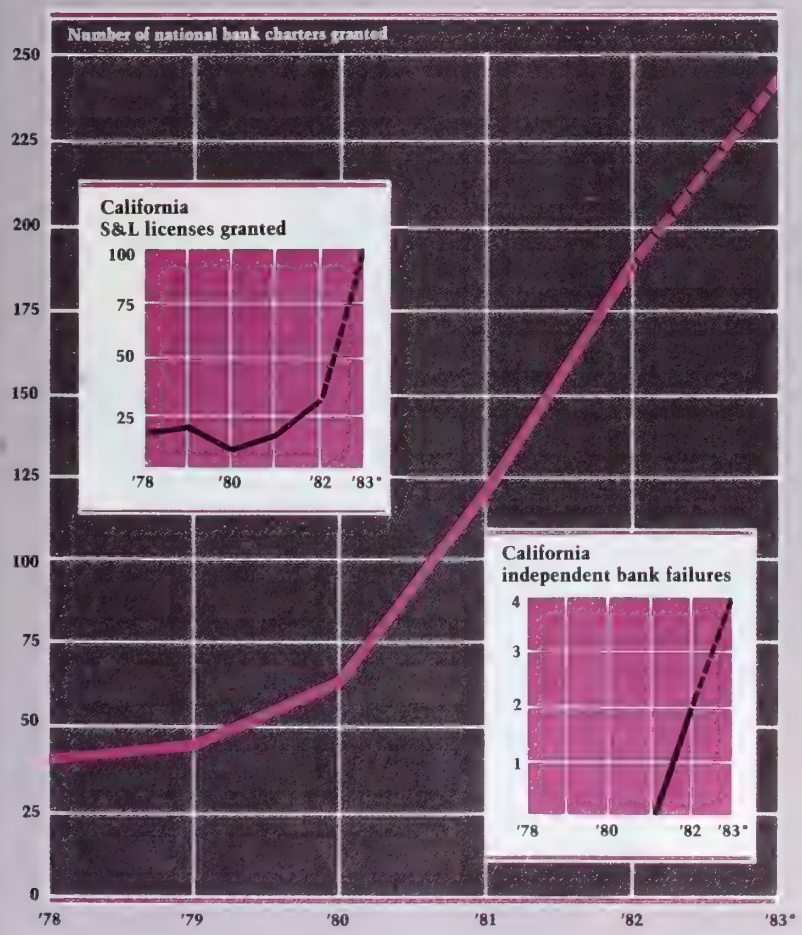
Out in the West, where entrepreneurs roam, there is more action in a once fusty industry than in RAMs or ROMs or double helixes. The latest cottage industry? Banking.

Mom-and-pop banks

New wave(s)

Now that nearly anyone with sufficient capital, management and a business plan can open a national bank, entrepreneurs are swarming into independent banking. The idea: Build up and sell out to larger banks or foreign interests. The trend is overheating in California, where so far this year four small banks have failed. Meanwhile, liberal changes in California savings-and-loan laws are encouraging a new wave of startups—independent S&Ls.



*Projection
Source: Comptroller of the Currency

By John Merwin

WITH DE FACTO interstate banks and other financial conglomerates dominating the landscape, one would not think little banks had much of a future. Certainly not much more than mom-and-pop hamburger stands had against McDonald's.

But don't tell that to banker-entrepreneurs in Texas or California. There independent banks are sprouting like weeds. Last year the Comptroller of the Currency approved 189 national bank charters. Half were in Texas or California. In January alone, doors swung open at an unprecedented 21 new independent banks in Texas. California currently lists 327 banking concerns. But another 127 are either in the charter application process, or already okayed, awaiting final approval to open the cages and drive-in windows. All of this is happening in California, where the megabanks, such as Bank of America, are pruning branches, citing high "brick and mortar" costs.

The boom is being powered by several sources. In Texas, bank holding companies bought 70 small banks last year, making hundreds of investors fat and sassy, ready to roll over their profits into new startups. Out West, California buyers are foreign groups, striving for a toehold in what generally is regarded as the nation's most attractive banking market. Prices have ranged up to three times book, though twice book is more common. In California there is hope of later selling out to interstate bank behemoths, once legal barriers are entirely removed.

The important third power source is in Washington, at the Comptroller's office, where national bank

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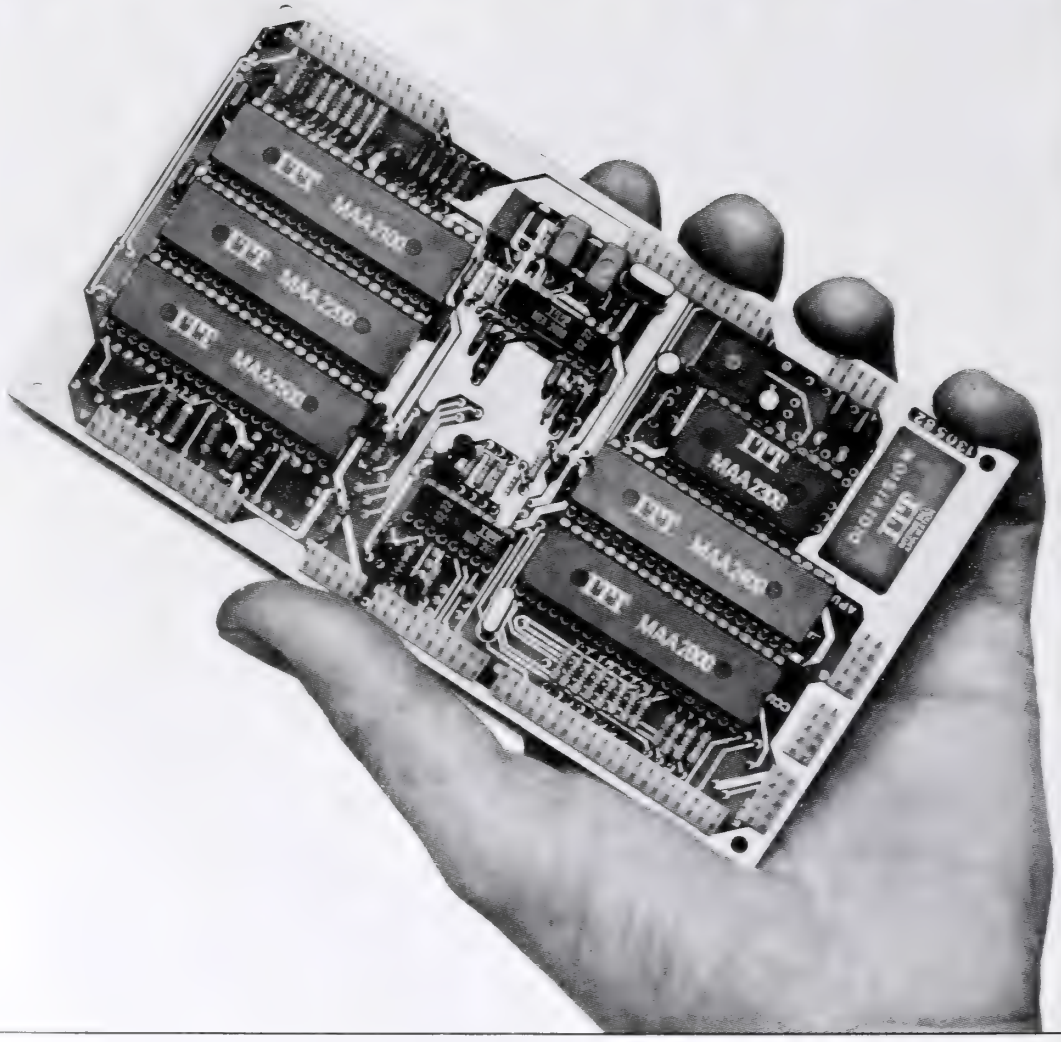

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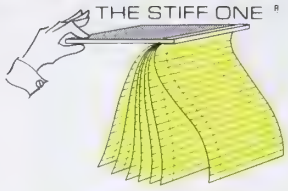

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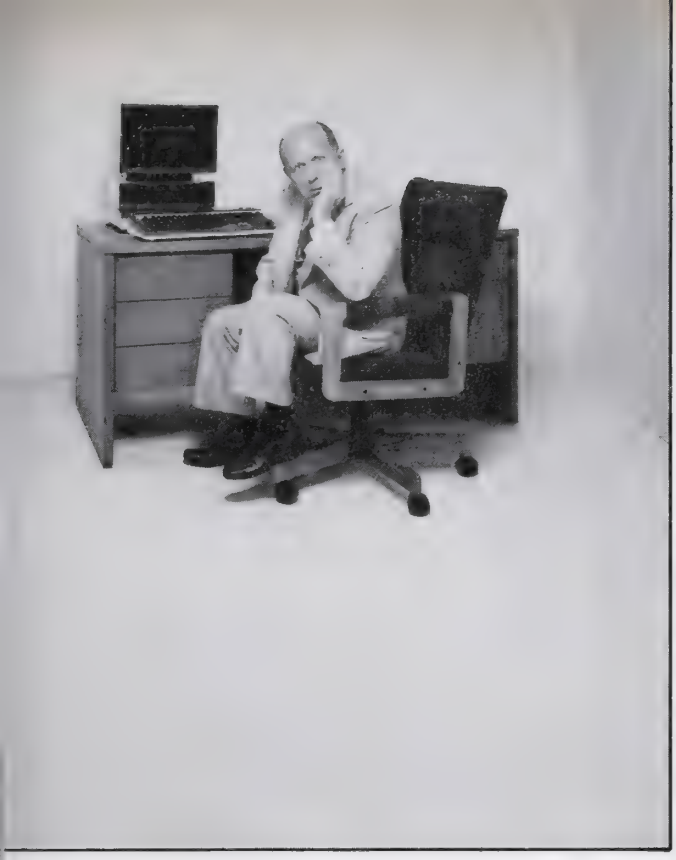
The latter is a mixed blessing. Until several years ago, recipients of national bank charters were protected from competition for several years. No neighboring startup would be approved without demonstrating "economic need" for a nearby bank. "We had such a beautiful regulated deal in banking," muses a wistful Gerry Findley, dean of California's bank consultants. "Only a fool could lose money. But that's all changed."

Listen to Ron Steinhart, a man who built and sold several independent banks but who has now forsaken the entrepreneurial life and is president of Interfirst Inc., Texas' largest bank holding company. "I'd think twice before doing it again," says Steinhart.

More than greed is involved. There's ego. It's nice to refer business associates to "my little bank." As USC professor and startup consultant Henry Cheeseman puts it, "Everybody wants to start two things in life. One is a restaurant. The other is a bank."

"With deregulation, these banks no longer have a franchise to sell. A holding company can open next door. Also, little banks don't have cheap deposits to offer acquirers. Rate deregulation means most of those old, cheap deposits now draw market interest rates." Another Texan, Jerry Ford, who owns controlling interest in nine rural west Texas banks, says he is reexamining the future of his investment, pressured by big city and out-of-state competition for his low-cost country deposits.

In California, the inevitable aftermath of an overheated trend is already visible. Several independent banks were shuttered recently in southern California, victims of the recklessness that comes with "easy money." At a Newport Beach bank, big depositors were offered free limousine service and gourmet dining. In what observers called "sweetheart lending," half of the trendy bank's loans were "classified" by examiners before closing the bank. Another atmospheric hazard: Small, new banks are vulnerable to a single, unforeseen blow. A suburban Dallas bank with assets of $30 million closed last year after a



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$5.7 million check-kiting loss was uncovered, allegedly involving a director's spouse, wiping out the bank's $3 million in capital. Insured depositors don't lose money in these closings, and often shareholders even recover much, if not all, of their original investment.

But failures are still the exceptions in the small-bank explosion. Most are faring well. That is why potential bank owners are still queueing up at the Comptroller of the Currency's window, hoping for a charter followed by an 8-to-1 payoff at sellout *(see box, p. 94)*. More than simple greed is involved. There's ego. It's nice to refer business associates to "my little bank." As University of Southern California professor and startup consultant Henry Cheeseman puts it, "Everybody wants to start two things in life. One is a restaurant. The other is a bank."

Why are most of these little banks prospering? Simple market economics: They fill a need. To their target customers, wealthy individuals and small businesses, the small banks offer fast loan decisions and continuity of service. Loan officers don't come and go as quickly as they customarily do at big banks. Bank of America has countered by cutting out cumbersome committees for many loans and by raising compensation for officers. Even so, little banks are slipping into the market with entrepreneurial flare. Some are hiring commissioned salesmen to gather mortgages from real estate brokers or escrow companies. Others dispatch couriers to pick up doctors' deposits.

Starting a new independent bank isn't difficult, with the help of one of California's thriving community of bank consultants. The largest is Ed Carpenter & Associates, which has 100 employees dealing with two-thirds of the state's banks. Carpenter will make presentations at capital-raising affairs, file personal biographies and financial statements, draw up a business plan, help find a president, select a site and later sit in on board meetings, advising on current

Love seats, box springs and banking

Since his family founded the company in Bakersfield 64 years ago, West Coast retailer Richard McMahan, owner of the 73-store McMahan Furniture chain, has been selling sofas, beds and chairs on credit—lending the company's capital to the store's 100,000 installment loan customers. Several years ago he realized that he was as much banker as merchant and decided that it made a lot of sense to take the plunge into consumer banking, accepting deposits and making car, boat and home improvement loans.

The U.S. Comptroller's office, issuer of national bank charters, enthusiastically agreed. It commissioned McMahan Furniture to enter bona fide consumer banking, in what may be a model for the "specialized" independent branch bank of the future.

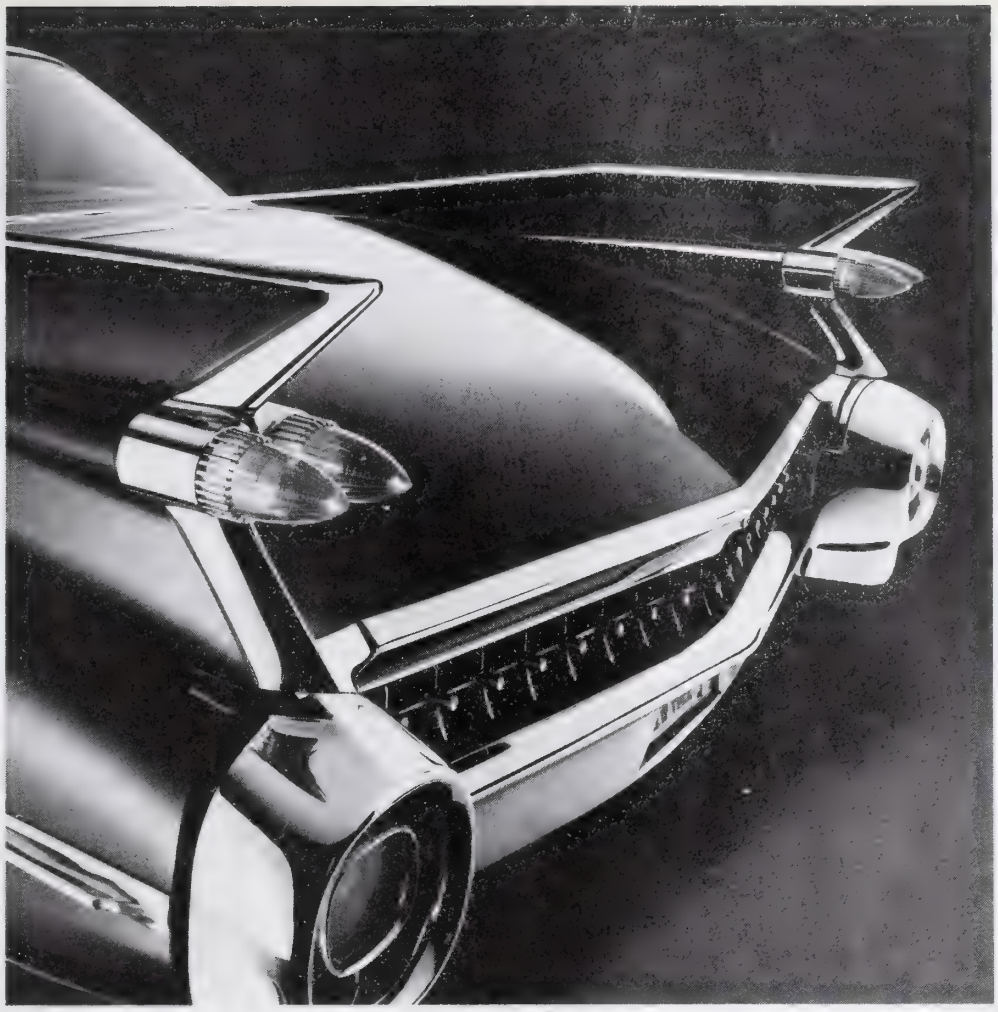
In mid-April McMahan opened his first branch, Western Family Bank, in Carlsbad, Calif., 30 minutes north of San Diego. Within five years he hopes to open full branches in 15 of his stores, while scattering automated teller machines among the chain's other in-state locations.

The key to success in consumer banking, McMahan knows, is holding costs low enough to profit from thousands of small accounts. Burdened by building expenses and high transaction costs, many small banks have pulled away from this end of the business, while larger banks are infuriating customers with long lines and hefty fees. McMahan must make consumer banking work because his novel charter prohibits commercial or corporate lending.

He does, however, have a decent chance of success. "We're already recognized by many families as somebody they've trusted for several generations," explains McMahan. "We are conveniently situated and will keep our banks open regular furniture-store hours, six days a week, including Friday nights till nine."

By establishing banks inside his stores, McMahan will have low "brick and mortar" costs, and the company already holds credit histories on 100,000 customers. "If we do realize the economies we anticipate," says McMahan, "we should be able to provide more banking services for less fees."

And if a checking account customer should take a fancy to a new coffee table, McMahan wouldn't argue either.—**J.M.**



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trends. The cost: about $40,000, up to door opening.

The toughest part is finding a competent president and a board of directors who can get along. On average, independent bank presidents survive about three years. Says Richard Boyle, president of southern California's Pioneer Bank, "The board consists of entrepreneurs who, because they've been successful in their own businesses, think they can run the bank. And what do you think their impression of a banker is in the first place? Entrepreneurs figure they can do a lot better 'than one of those idiots.' " That's okay with Carpenter and Findley, who run bank-president head-hunting firms on the side.

Though the line of bank charters remains long, the next financial *de novo* wave, savings and loans, already is in sight. Recently California became the first state to lift restrictions on S&L lending and investment, throwing wide the door for a dynamic new generation of thrifts, perhaps another important California trend destined to spread east. While only 45 state S&L charters were granted during the last two years in California, today 77 applicants have charters in hand or are waiting approval. Not only are entrepreneurial types filing for charters, but major industrial companies and utilities also are expected to sweep into California to experiment at building what some think will be the S&L of the future.

Under new California law, S&Ls are no longer restricted principally to mortgage-making. With permission from the state's S&L department, an S&L can take equity positions in most anything, from real estate development to common stock or franchise food outlets. "California is now to the S&L industry nationwide what the state has been to high tech," says consultant Henry Cheeseman. "Entrepreneurs are getting into S&Ls here because, for the first time, S&Ls are operating in a free market economy. This is a new S&L industry."

Compared with banks, California S&Ls offer several advantages. They require less capital to start, $2 million versus $4 million to $5 million for an urban bank. S&Ls can leverage themselves 175% more than banks, taking in $33 of deposits for every dollar of capital. And S&Ls have broad investment powers.

Consider this not-so-theoretical example. A major oil company charters a California S&L capitalized at $2 million. It leverages conservatively, taking in $40 million of deposits. The S&L covers interest costs and overhead by lending out $30 million in 13% mortgages, leaving $10 million to invest in real estate, oilfield equipment leasing or, perhaps, exploration. For the oil company, paying 9% today on deposits is cheaper money than it can obtain elsewhere, and an S&L pays little in taxes. Raise the initial capital to $25 million and we're talking about $125 million for nonmortgage equity investing. Consultant Carpenter says within the next year he will bring forth a major oil company and a major utility to test the waters.

"You tell me what a corporation could do with millions of interest-free dollars," says Carpenter enthusiastically. "Our big real estate developers say with their eyes closed they could make 10% on development, if they had no interest charges. Now in California we have the equivalent of a Japanese or West German bank, true merchant banking for the first time."

And what happens if an entrepreneur pulls off Carpenter's S&L strategy? "Build them up and sell them, not for 2 or 3 times book value, like a bank, but for 10 or 15 times earnings," he smiles. When California consultants begin talking like that, you know two things for sure: The fabled U.S. economic recovery is here, and the overheating of a trend is not far off. ■

Banking on a sellout

In his well-appointed office in Fountain Valley, Calif., Orange Bancorp President Lawrence Holmes points to a framed photograph of a woodsy scene in Vermont. "This is the land we're going to build on," says the self-assured, 37-year-old Holmes, already contemplating a family return home from southern California.

Holmes, typical of a new breed of entrepreneurs who have set up independent banks in California and Texas *(see story)*, isn't talking about retiring but about selling Orange Bancorp a few years hence at an 8-to-1 or better payoff.

What makes him think he can do it? Partly contempt for the competition. A talkative, carefully groomed, high-achiever type, Holmes explains how he got into banking: "I needed a few more job interviews to fill up my card after finishing an M.B.A.," he says, "so I signed up for several bank interviews. I was unimpressed with all of the senior people I met at the banks. So I figured there ought to be a lot of opportunity in banking."

After working stints at two large California banks and smaller independents, Holmes pulled together a group of organizers and founded Bank of Orange County with $2.8 million capital—$100,000 from each of nine founding directors, plus capital from other investors. With retained earnings and a recent stock offering, Holmes figures to build that to $14 million by 1987 and then sell out to a foreign buyer or perhaps an expanding interstate bank for a lofty 3 times book value, or more than $40 million.

There's no denying he has made a good start. Principally serving small businesses and wealthy individuals, Bank of Orange County's 1982 deposits grew to $53 million, a 52% increase over its first full year of operation. His accounts carry large checking balances but also borrow heavily.

And not all of those accounts are local. Last year 30% of Orange's deposits came from the newly opened Los Angeles office. Holmes, after forming a holding company, has also acquired a Long Beach thrift and loan and plunged into Silicon Valley with a half-owned San Jose subsidiary, Bank of Northern California. He reckons that setting up beachheads in both ends of the state will make Orange Bancorp attractive to the eventual buyer.

What could happen to upset Holmes' neat schedule? Plenty. California bank consultant Gerry Findley points out that banks growing more than 25% annually, after the third year often make mistakes that only surface several years later. Of 17 such rapid-growth banks in a recent Findley study, "All 17 developed serious problems," he says.

Such things happen to other people, shrugs the ever-confident Holmes, who now is approaching the critical three-year mark. "Independent banks fail today solely because of bad management," he says. "So few independent bank presidents are any good that if they were in any other industry, they would probably be unemployed." Success? Or pride goeth . . . ?—**J.M.**

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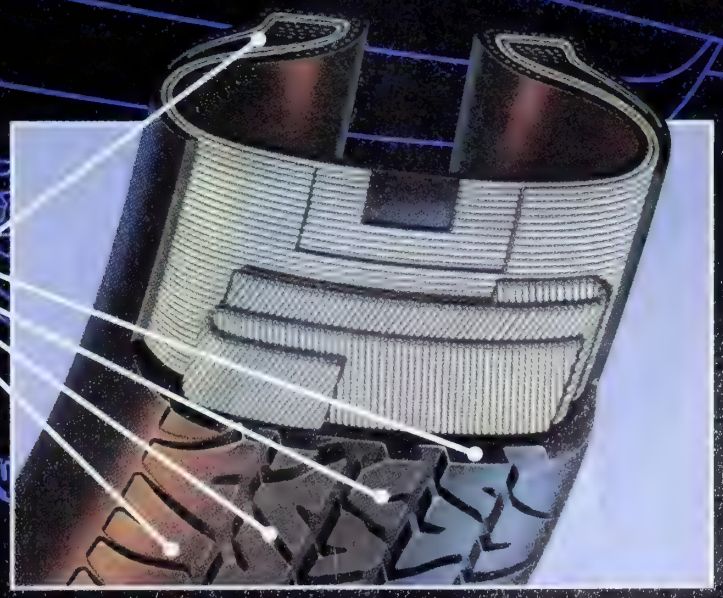

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Getty's cash gusher

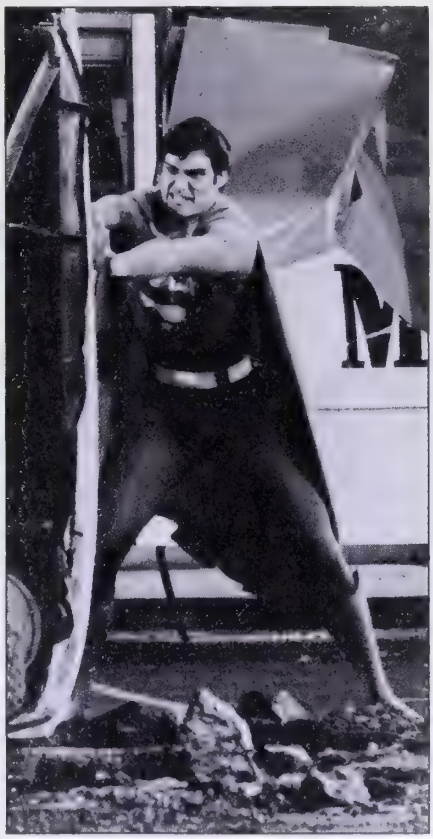
The Getty Oil Co. is a tremendous cash machine. Even though its earnings were down by 17%, to $8.61 a share last year, its $2 billion-plus cash flow decreased by only about $20 million and amounted to $25 a share. Rumors have sent Getty stock climbing 20%, to a recent 67. It started with a report by Kurt Wulff of Donaldson, Lufkin & Jenrette. Wulff figured that if Getty separated its crude oil operations from its refining and marketing, or created a royalty trust, shareholders would realize huge gains in the value of their stock. Why should that send the stock up? Because it would enable Getty to pass on a lot of its profits to stockholders without having to pay corporate taxes on them. Wulff argued that a generous payout makes sense as an alternative to spending all of the money on exploration at a time when oil is hard to find and the price dropping. Don't bet on its happening, though. It would involve a semiliquidation of the company, and how many managements willingly liquidate themselves out of work? And this management is firmly in the saddle, since it is backed by the Sarah Getty Trust and the Getty Museum, which together own more than half the roughly 80 million shares. However, a major stockholder espouses a more modest alternative plan that does seem acceptable to management. He's Fayez Sarofim, Houston's big money manager, whose clients own 2 million-plus shares of Getty. Last year Getty bought in about 2.8 million shares of its common stock, reducing capitalization by about 3.5% and increasing the equity of remaining shareholders proportionately. Sarofim has been looking for continuation of this program, which deprives management of only a minor amount of cash flow but is good for remaining stockholders. "Buying in the stock is painless and doesn't upset the corporate structure," Sarofim says. Conclusion: Getty is probably a solid buy, but don't look for anything dramatic.—**Thomas Jaffe**

Jobless but not looking

When it was announced last month that Prime Computer's first-quarter net would be off 20%, the stock did what high-P/E stocks usually do when their followers get a nasty surprise: It collapsed. In just three days the stock dropped 20%, to 33¼, shedding in the process more than a quarter billion dollars in market value. Meanwhile up in Wayland, Mass., Robert Claussen was smiling all the way to the bank. In mid-February Bob had quit his $140,000 job as Prime's vice president for domestic sales, but he will not be applying for unemployment insurance. A few weeks earlier he sold all the Prime shares he owned. Average price: around 40. So Bob walked off with a little bit short of $5 million on stock that he picked up either in the market or on option for from 39 cents to $6 a share. His net profit is about $3.5 million. "I'm not looking for a job right now," he told us cheerily. "I already own a house on the Cape, and I've just bought a 20-foot Runabout. Oh, yes. I also just bought a black Labrador puppy." Some of the people who picked up the shares he sold must wonder whether they haven't bought a dog, too.—**T.J.**

A good word for Warner

The once hot Warner Communications stock hasn't many friends today. It's a sort of pariah. In a roaring bull market it has managed to lose 60% of its price. Warner is a victim of two things: a slump in video games and previous overtouting of the stock. But Warner isn't entirely friendless. Arthur Rockwell, a well-regarded analyst at Los Angeles' Crowell, Weedon & Co., thinks Warner is a good buy at around the recent 25. "This stock has been so battered down," he says, "that by now there's a lot less risk left." That's fine, but what would make the stock go up? The movies, Rockwell opines. He's estimating a 10% gain in total movie receipts this year (to about $3.8 billion), and thinks Warner will improve its share in this growing market. In 1980 Warner grabbed an 18% share but slumped to 10% last year; Rockwell is looking for a rebound to 15% this year. The 1983 schedule includes *Superman III*, a new James Bond thriller, a production from *ET* director Steven Spielberg and *The Right Stuff*, about the seven original astronauts. If he's right, Warner's film revenues would jump from $340 million to about $475 million—with a highly leveraged impact on the bottom line. Thus Warner would do better even though the record business still leaves a lot to be desired and Atari won't be in the black again until the second half. Rockwell is predicting earnings of $3 this year, "more than enough for a lot of people just waiting to jump back in."—**T.J.**



Christopher Reeve as Superman
Coming to the rescue of Warner?

Silent partner

Why would someone who rarely talks to the financial press buy an interest in a financial magazine? We don't know, since Carl Lindner, the reclusive CEO of American Financial Corp. and sometime corporate raider, is running true to form and will not return our phone calls.

But Douglas McIntyre, the 28-year-old new president of Financial World Partners—which is in the process of buying *Financial World* for $7.25 million in cash and notes—confirms that Lindner is among the limited partners. Mark Meagher, a 50-year-old investment banker who was president and chief operating officer of the Washington Post Co. until 1981, will be publisher. McIntyre came from Time Inc., where he most recently was manager of special projects. "We are talking right now about some database publishing and maybe some newsletter work, but our first priority is to put out the premium investment magazine in the industry," says McIntyre. Wonder if Carl Lindner will talk to them?—**Priscilla S. Meyer**

The Rouse Co., once the premier suburban mall developer, is turning to urban projects. Sign of the times?

Make room, Disney World, Federated and Gimbels

By Howard Rudnitsky

LAST AUGUST 100,000 Milwaukeeans jammed the opening of their new, $70 million Grand Avenue downtown mall complex developed by the Rouse Co. of Columbia, Md. They found 160 shops and gaily decorated pushcarts in the four-block-long enclosed mall containing two arcades and five historic buildings. A newly refurbished Gimbels anchored one end and an equally refurbished Boston Store department store the other.

Near the complex' center was a spectacular Victorian retail arcade, which was originally built in 1916, restored and topped by a vaulted skylight and rotunda.

In the new arcade, fountains sprayed water high into the air. Both arcades were festooned with plantings and elegant-looking brass handrails. Large photo murals, including colorful scenes of a Bavarian beer garden, hung from the walls. Brass bands were playing. There were clowns and tumblers and balloons.

In a city hard hit by the worst recession in 40 years, such showmanship had more than a little effect.

Better yet, eight months later, enough spectacle remains for Grand Avenue to draw 60,000 shoppers on a weekend, some from suburbs with malls of their own.

Rouse has also developed spectacular, successful marketplaces in downtown Boston, Baltimore, Philadelphia and Santa Monica, and plans to open another one this July, called South Street Seaport, along the docks of New York City. Last year Rouse's Faneuil Hall marketplace in Boston drew more visitors than Disney World. The mall visitors didn't pay to get in, but they did spend lots of money shopping and eating, some $90 million last year. Disney sells fantasy. Rouse sells themes. And the themes sell goods.

Rouse has 12 other urban projects being planned or under construction.

The Columbia, Md.-based developer also manages or owns some 50 suburban shopping centers where 5,500 merchants last year generated $3.5 billion worth of retail sales at nearly $185 a square foot. The department store anchors, which rely on their own showmanship, often are lucky if they reach $150 a square foot. These established regional centers generate cash for the new ventures: Last year the company earned $24 million before depreciation, an increase of 45% over 1981. Earnings growth has averaged 18% for five years. The worth of Rouse's 36 owned centers, carried at $59 million, has been appraised at $475 million. That works out to $31.59 a share, up 19% from 1981.

Under 52-year-old lawyer Mathias J. DeVito, current CEO and architect of Rouse's turnaround, the company is a far cry from 1974, when it was in serious trouble. Short-term debt stood at $80 million, and equity was at a mere $6 million.

The shopping center development company had been rapidly built up by its flamboyant founder, Jim Rouse, in the Fifties and Sixties. But he had

Milwaukee's Grand Avenue downtown mall complex
The balloons and clowns have departed, but the merchandising magic stays on.

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extended himself beyond his highly profitable shopping malls and mortgage financing into ill-fated ventures like modular housing, a REIT and a group of inns and apartments. Rouse also got involved in the "new town" craze, building Columbia, Md.

Then came the shakeout in 1973-74, and worried lenders demanded that Rouse retrench.

DeVito, whom Rouse appointed to clean up the mess, was forced to rethink what Rouse should be doing.

Clearly, shopping centers and mortgage lending were in that category. Everything else was to be unloaded at a cost of $30 million, except Columbia, Md., which Rouse and partner Connecticut General were too far into to get out of. (DeVito expects a "de-

The Rouse Co. CEO Mathias J. DeVito
There's no biz like show biz.

cent return" by the year 2000, but only after 30 years of work.)

DeVito, who gave up a Baltimore law partnership to come to Rouse in 1968, slashed the corporate staff in half and sold its half-interest in seven shopping centers, which raised $28 million in badly needed cash.

While DeVito has steered a financially conservative course, he has been bold and original in urban retailing. The fact that regional suburban malls were beginning to become a mature market gave Rouse an added sense of urgency. Says DeVito: "We weren't interested in going into middle and smaller markets in the Sunbelt and in places where there aren't many people or where the area was being combed over by lots of developers. We belonged in expensive, high-amenity projects in an urban location." Success with Boston's Faneuil Hall marketplace, claims DeVito, "gave us the courage."

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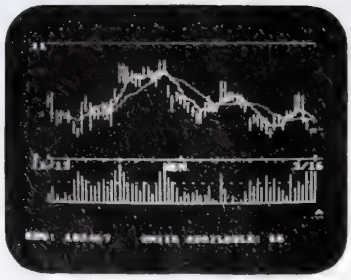

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That courage is paying off. Says Bruce Garrison, analyst at Houston's Lovett Mitchell Webb, "Rouse's four urban centers are generating sales of over $300 a square foot."

For Rouse they are already becoming a bonanza. Rouse's cash investment for each urban center has averaged a little more than $2 million, according to Garrison. The cash flows to Rouse on its first four urban centers are currently averaging over $2.5 million a year.

Going into a deal with a minimum of cash is the secret.

Take Milwaukee's Grand Avenue mall. The city, the federal government, a large insurance company, 46 local businesses and the two department stores invested $70 million. Rouse's investment: $500,000. Rouse's equity interest: half of the excess cash flow generated, plus a share in residual values. Rouse usually winds up owning half or more of the equity in the part of the mall it leases because as manager, guiding light and all-around impresario, Rouse in a sense is the mall's equity.

Crows DeVito, "Today we're renting at $15 to $18 a square foot." With close to 7 million square feet to rerent in the next few years, DeVito points out, "Those are very big numbers."

Rouse especially likes to renovate in a deteriorated historic area because the projects that result are one of a kind. As Bruce Garrison points out, "A DeBartolo can't come in across the street and swiftly throw up a clone as he can in the suburbs." So DeVito has 12 major urban projects in the works, but only one suburban mall.

Not that DeVito is walking away from the suburbs. Says he: "There's plenty of opportunity left in expanding or remodeling existing malls."

In addition DeVito has a nice new source of income. He gets pension funds and other investors to lay out the hefty amounts of cash needed to acquire and upgrade existing suburban malls. Moreover, the pension funds reimburse Rouse for mall operating costs, and Rouse often obtains around half of the growth in cash flow they generate. In just four years, Rouse has either bought or assumed the management of 21 malls for investors. Says Garrison, "The pension funds need Rouse's talents." So they're willing to earn less up front—often only 9% or 10%—and benefit from improved cash flows later.

He's also upgrading his own malls. And what upgrades. The majority of Rouse's malls are getting to be 15 years old or more. Many leases written then with $3-a-square-foot rentals are starting to come up. Crows DeVito, "Today we're renting at $15 to $18 a square foot." With close to 7 million square feet to re-rent in the next few years, DeVito points out, "Those are very big numbers."

Some very large Rouse stockholders, namely Canada's Trizec Corp., a major real estate company controlled by the Reichmann and Bronfman interests, and several major pension funds are looking at the same numbers, and they agree with DeVito.

The institutions are passive investors, but that may change for Trizec after its agreement not to buy more than 25% of Rouse stock expires at the end of 1986. (In 1981 DeVito, concerned about takeover because his stock was undervalued, made a deal with Trizec, which had previously bought 1 million Rouse shares as an investment, to sell 1.2 million shares of new stock at $30 when the market price was $24.)

DeVito wanted to get more equity and at the same time make it more difficult for an unfriendly takeover to occur. The Canadians wanted more than 20% of Rouse so they could consolidate Rouse's earnings. And they figured that the market value of Rouse properties was worth more than $30 a share.

They figured right.

According to analyst Garrison, "Rouse's appraised value, now $31.59 a share, should increase about $5 a share a year over the next five years, so the Trizec people have to be happy with their investment. As the date of the standstill agreement with Rouse nears expiration, the gap between the current price [now $27] and the appraised value should disappear."

Will there be a merger? Trizec already has three of its people on Rouse's board. It also owns Ernest W. Hahn Co., a West Coast-based shopping center developer, a natural fit. The prospect is made more likely because three major institutional shareholders controlling 16% of the shares also sit on Rouse's board.

The retired Jim Rouse still owns about 5% of Rouse stock, but current executives own relatively few shares. Says DeVito: "The Trizec people are wonderful shareholders who have been very helpful. It's much too early to speculate. We spend our time developing exciting new projects like South Street Seaport." ■

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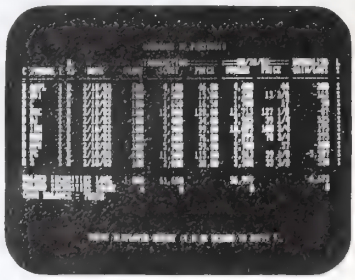

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Worried about the price of a plane ticket to Montana? Well, your next worry might be the cost of a phone call to Chad.

Competition comes to Comsat

By Pamela Sherrid

REMEMBER THE HOTTEST stock of 1964? Communications Satellite Corp. went public at $20, and buyers who ordered 100 shares received only 3. A unique creation of Congress, the Washington, D.C.-based company enjoys a commercial monopoly on satellite communications with foreign countries. Within two years Comsat shares had risen to $71 on a price/earnings multiple that defied gravity.

Unfortunately, the riches that early investors anticipated never really came. Though Comsat remains a conceptual favorite, its stock recently sold for just $68, down from an all-time high of $92 last fall. The recent slide began shortly before the company announced plans to sell $78 million worth of stock, its second-ever equity offering.

Joseph Charyk, chief executive of Comsat Corp.
How long will his monopoly game last?

Comsat netted $43 million last year on sales of $410 million, but it needs more money for a bold expansion plan that has lots of shareholders worried. Joseph Charyk, an aeronautical engineer who has run the company since its birth, is committed to two costly endeavors: Satellite Business Systems, a partnership with Aetna and IBM that provides communications services to large corporations, and a scheme to use satellites to beam television programming into homes.

Sure, these diversifications are risky and already losing money. But by focusing on them, analysts miss more troubling problems in Comsat's basic business. Historically, Comsat's main worry was to keep its rate of return *down*—below 20% in recent years—to avoid arousing the Federal Communications Commission. But new technology makes Charyk's international satellite business look a lot less like a natural monopoly.

The AT&T settlement, meanwhile, resolved many domestic telecommunications issues, and Reagan Administration deregulators are looking for new reforms. Comsat is a tempting target. "The international scene looks like the domestic one ten years ago, when MCI was getting started," says one industry expert.

To understand what's at stake, you need to know more about Comsat's history. The company was granted its monopoly as part of a Kennedy Administration plan to set up a global communications network called Intelsat. It is now a consortium of 109 countries, praised as one of the few successful multinational organizations. Ownership in Intelsat is proportional to use, and Comsat owns 24%. That means the company actually depends on two monopolies: its own U.S. access to Intelsat and Intelsat's position as the only international satellite network outside of the Soviet bloc.

First things first. Comsat's customers, carriers like AT&T, ITT and RCA, have never been happy about its privileged position. No wonder. Look at the $390 a month that Intelsat charges Comsat for a satellite circuit, vs. the $1,125 a month that Comsat charges them. There are earth station and other costs in that gap, but "That's still a heck of a markup," says Frank DeRosa, executive vice

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president at RCA Communications.

Last August the FCC changed the rules by allowing Comsat to become more than a "carrier's carrier" and to market directly to end-users. While Charyk isn't interested in selling to the man in the street, he might want to serve big customers like the Pentagon. The bad news for Comsat, however, is that the FCC usually follows a tit with a tat.

Charyk is gearing up to protect his turf—especially satellite capacity, his most profitable business. For one thing, Comsat argues that multiple access to Intelsat satellites runs contrary to an international agreement. But that case is weak. Already the U.K., one of the few countries to share the U.S.' pro-competition attitude toward telecommunications, has authorized competing Intelsat service.

What about competition to Intelsat? Regional satellites are already up over Southeast Asia, and Arabsat and Eutelsat are on the way. "Intelsat hasn't dared to reject these proposals for fear it would face open defiance," says one consultant. But a private Japanese study of a network linking Japan and the U.S.' West Coast has finally stirred strong language. "That would be the first step toward a balkanizing of the world's communications," says Joseph Pelton, assistant to Intelsat's director general.

Diplomatic pressures may limit such government initiatives. But they may not be able to stop eager entrepreneurs, such as those at newly founded Orion Satellite Corp. It hopes to raise $230 million for private satellites to link North America and Europe *(see p. 110)*. Orion's proposal brings up issues similar to those involving AT&T's monopoly by offering rate cuts of up to 50% for big customers. "That would be detrimental to the system as a whole and especially to developing countries," says Santiago Astrain, the Chilean who is Intelsat's director general.

If the diversification works, Charyk will look doubly smart: He got Comsat's money out of the international satellite business while the getting was good.

This sounds a lot like the folks in Montana who worry about reduced air schedules and rising telephone bills. Remember that the U.S. set up Intelsat's cross-subsidizing system to help the Chads and Upper Voltas of the world. On the other hand, the State Department is already looking at that policy in light of rival regional networks. "We don't want to support Intelsat and suddenly find that the other industrialized countries throw in the towel on it," says one official.

How will all these conflicting pressures be resolved? Some experts think the writing is already on the wall. "Given the proliferation of regional systems and technological advance, the Comsat-Intelsat monopoly is just not sustainable," says Eli Noam, a telecommunications economist at Columbia University.

With those prospects, Comsat's diversification looks even more ambitious. Most of its $200 million contribution to Satellite Business Systems, the joint venture with IBM and Aetna, came from retained earnings and is already out the door. But Comsat is counting on cash flow from its basic business later in this decade to help pay for its heavy commitment to distributed broadcasting. Even if Comsat succeeds in finding a 50% partner, the burden could come to $300 million.

That money may be hard to come by, if communications price wars break out in the skies. Then again, if Comsat's diversification works, Joseph Charyk will look doubly smart: He got Comsat's money out of the international satellite business while the getting was good. ■

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A former government lawyer wants to launch his own communications satellite. He says he already has the $230 million. Now comes the hard part.

Up against Comsat

By Carol E.Curtis

GOVERNMENT LAWYERS who forsake a comfortable career to risk everything as entrepreneurs are an understandably rare species. Rarer still is an entrepreneur with a truly audacious idea. Nevertheless, here comes Thomas McKnight, a former attorney with the Federal Communications Commission, who wants to build and operate a privately owned satellite system that would, if you please, compete with giant Intelsat, the global monopoly operated by the U.S. and 108 other countries. McKnight's proposal for a U.S.-European link would pit him directly against Comsat, America's representative on Intelsat and a powerful Washington bureaucracy in its own right *(see p. 106)*.

But that is no obstacle to McKnight, 38. "By God, we can hang a satellite over the equator!" he exclaims. Unlawyerlike his venture may be, but McKnight's background is all in the law. Fresh out of Ohio State in 1972 with his J.D. degree, McKnight joined a government task force on the deregulation of cable TV. That got his foot in the door at the FCC, where he worked his way up to the commissioner's personal staff.

In 1976 McKnight caught the eye of someone in President Gerald R. Ford's White House. Soon he was working in the White House Office of Telecommunications Policy—a pretty fast start for a young man barely four years out of law school.

When the political winds shift and such jobs end, the standard route for lawyers is to join a powerful Washington law firm. McKnight turned his back on that. He landed at the Gannett newspaper chain, where his job was to create an alternative for the company in case *USA Today*, its national daily newspaper, failed to fly. "While I was noodling on concepts," McKnight says, "it occurred to me that the most critical need in telecommunications today is an electronic bridge across the North Atlantic."

Thomas McKnight of Orion
"By God, we can hang a satellite!"

McKnight reasoned that the common-carrier facilities linking the U.S. and Europe are likely to reach saturation at the end of the decade, when more satellite linkups will be crucial. So what about starting a private system that would sell its capacity in segments to anyone able to pay the price? Big corporate users would then no longer have a need for Comsat, which might, as it runs out of capacity, have to bump them for other, higher-priority users. Instead, they would, in effect, own their own piece of a satellite.

At first glance, the chief impediment to such a massive undertaking would appear to be money. The three satellites McKnight wants to build and launch will, he figures, cost $230 million. But former political operative McKnight apparently learned a thing or two about raising cash.

McKnight's privately owned company, Orion Satellite Corp., incorporated last October, has as its principal investors some of the best-known names in the industry, including Gustave Hauser, former chairman of Warner Amex. Orion is also being assisted by Pittsburgh National Bank.

McKnight says he already has commitments for the full $230 million. He also says that "expressions of interest" have been received from large potential customers, including multinational corporations.

McKnight also believes that technical expertise will not be a stumbling block. He has already brought on board Walter Morgan, a former senior scientist with Comsat, to manage the technical side.

No, the real question appears to be government approval. For Orion to fly, the FCC must rule that it would not interfere with Intelsat. McKnight thus has the burden of proving that his satellites would be "technically compatible" with Intelsat's and would not do "significant economic harm" to the existing common carrier system.

That may be a tall order. Comsat, with which Orion would compete directly, understandably takes a dim view of McKnight's plans.

Which of the two potential competitors will prevail at the FCC? No novice at this game, McKnight has his argument nailed down: "Does the president of Comsat compete with public transportation when he drives himself to work?" McKnight asks rhetorically. "All we are offering is a private conveyance."

McKnight says that even if the FCC turns down his plan, the agency is soon likely to face another like it. "The deregulation trend is moving toward approval of a system such as ours," he says. "Sooner or later, decision makers will realize there is room for private ownership." McKnight has reserved 1986 launch dates for his satellites on the NASA shuttle. ■

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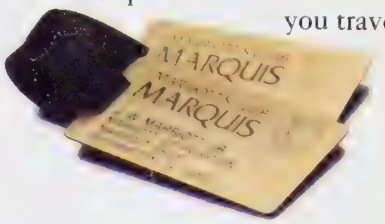

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Want to buy the nation's third-largest auto battery maker? It makes money. It just doesn't fit Gould's image.

Getting rid of a good thing

By Jonathan Greenberg

When Forbes first contacted Gould Inc. to do a story on what was believed to be a highly promising new Gould product, we were met with an unusual response. Go away, the company told us. Was the product, then, highly secret? Not at all. Problem was, the product was a new type of car battery. Pretty humdrum, that, from a company that is out there on the frontiers of technology.

Several weeks later Gould announced its battery division was for sale. Rather novel, selling a division that might be on the verge of transforming an old industry. But the act is consistent for Gould and for its tough boss, William Ylvisaker. It demonstrates an almost fanatical determination to be high tech and nothing but high tech. Bill Ylvisaker would prefer to use the new type battery as a selling point to help fetch a better price for the entire division. Ylvisaker wants to shed Gould's old battery image, along with the division that makes them.

Ylvisaker is a man whose drive for success infuses the entire company. He takes great pains to publicize the future-oriented nature of Gould to employees and investors alike. Entering its Rolling Meadows, Ill. headquarters, employees are greeted by a large standing sign displaying the recent day's stock price. An aggressive advertising campaign notes that the company's catalog of products focuses on defense systems, 32-bit minicomputers, factory automation, test and measurement, medical instrumentation and electronic components like custom-designed chips. All true. Ylvisaker likes to call this assemblage of interests "a honeycomb with a purpose in mind." He rarely mentions batteries, Gould's old-line business, which provided 24% of Gould's $1.6 billion sales last year.

Gould CEO William Ylvisaker
"We prefer electronics."

In his 15 years at the helm, Ylvisaker has sold all his other industrial businesses, like engine parts and ball bearings, and used the money to acquire this collection of emerging companies with leading positions in one or another electronics market. He boasts of an anticipated 20% compound annual growth rate through the Eighties.

A former Bank of New York analyst, Ylvisaker has convinced Wall Street of this, too. Although 1982 earnings were up a modest 3.5%, Gould sells at some 15 times earnings, up from 7 times earnings four years ago, when Gould was still considered an industrial company.

Batteries are clearly the square peg in this round hole. Return on assets in most of his electronics lines exceeds 20%, while the glamourless battery business earns 10%.

"Gould wants to get rid of batteries," notes Pershing analyst Phil Cavalier. "But they have a problem here: It's a buyer's market and a mundane business."

For a mundane business, Gould doesn't do badly in batteries. Operating earnings for the division were $31.5 million pretax on sales of $390 million last year. Yet the $2 billion auto market, which provides nearly all of Gould's business, grew by a meager 3% last year. And Gould managed to make money in a crowded, competitively priced field where a shakeout is going on. Inco recently sold Exide Corp., its auto battery maker, and Northwest Industries' General Battery division is reportedly on the selling block. But Gould, third in the industry after Globe Union and Delco with a 15% market share, has a new trump card to attract a potential buyer: Cathanode.

Cathanode is a new lighter-weight battery that provides 40% more starting power than conventional batteries. This is important in cold weather, and for small-engine cars that need more power to start. Gould hopes Cathanode will become a leader in the premium market. Like other maintenance-free batteries, it retails for $90—twice the price of an ordinary battery—and carries higher margins. Cathanode was introduced in the Twin Cities area last fall without any advertising. Yet demand has been running at twice the rate of sales. Nonetheless, Gould would rather sell out with the promise of Cathanode boosting the sales price than allocate the necessary millions to retool plants. "We prefer the higher rate of return we get in electronics," says Ylvisaker.

Harry Caunter, group vice president in charge of batteries, says that Cathanode could be the maintenance-free battery of the Eighties. "If you bought the business," he says, "you could invest in Cathanode at a much faster rate than Gould is doing, based on the earnings of the battery division."

Gould's President David Simpson concurs: "We can't give Cathanode the sort of major play it deserves. With maximum investment, that thing could really be a moneymaker."

Not many companies would willingly part with so promising a product. But not many executives are as determined as Ylvisaker to get out on the cutting edge of technology. ■

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Government efforts to house the poor have become attractive tax shelters for the rich. No wonder these programs are hard to kill.

Something for everyone

By Laura Saunders

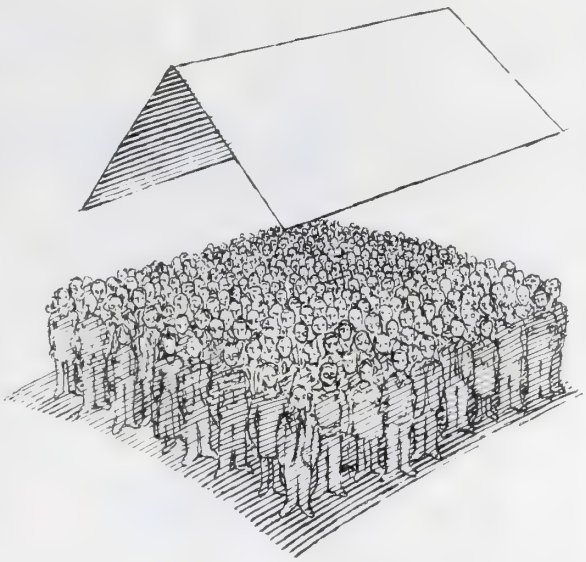
WHAT AN IRONY. Even as the IRS is cracking down on tax shelters, Uncle Sam is encouraging one of the biggest of them all. It stems from programs that provide rental housing for low-income families. Funding comes straight from the government, which also partly guarantees the income and provides—so promoters claim—substantial protection against audit problems.

This curious situation began in the early 1970s, when politicians wanted to provide housing for families with annual incomes between $10,000 and $25,000. Congress funded a series of programs designed to stimulate low-income housing by offering incentives for developers. Some early projects were disasters, and foreclosures left the Department of Housing & Urban Development owning several instant slums.

But later projects, including many garden apartments built in rural areas under the authority of the Farmers Home Administration, have been bonanzas for tenants and investors alike. The total of FmHA and HUD projects built so far will cost Uncle Sam over $125 billion.

These developments are largely financed through 40-to-50-year government-guaranteed loans. This typically provides from 80% to 95% of the capital at below-market rates, and the developer raises the rest. The apartments must be used as low-income housing for at least 20 years, but during that time the government provides a guaranteed rental subsidy that virtually insures that a capable developer can meet his costs and pay the mortgage. Then, when the low-income restriction ends, the property is just another piece of real estate with an attractive mortgage.

That's not all. Congress allows these projects a sizable depreciation



writeoff, which means that an investor can get as much as $3 of sheltered income per $1 at risk over the life of the deal. For someone in the 50% tax bracket, that works out to $1.50 in tax savings for every $1 invested. The initial investment can be made through public offerings with units as small as $5,000. This makes these programs attractive to investors who can't afford most more aggressively marketed tax shelters.

Nothing's perfect, of course. There are potential problems even with a government-assisted tax avoidance. One rub with low-income housing programs is that investors are totally dependent upon the general partner for making sure their property maintains its value. There are lots of potential snags: The location could turn into a South Bronx-like disaster area, the building could require extensive repairs or the tenants could wreck their apartments.

If all goes well, however, the partnership ends when depreciation runs out, after about 15 years. Then selling the property provides enough money to pay any taxes owed by the limited partners and, after that, generous fees to the general partner. There's even hope for a windfall: The property could have appreciated enough to provide capital gains.

Since these shelters first became available, they have sold briskly—even though there has been little publicity because most financing is done through private placements. "This has been great for some investors," says Carter Sanders, a HUD official. "In private deals, the money is usually paid in over five years, and the investment can finance itself from tax savings generated after the first payment."

Given the current budget deficits, it's no surprise that the Reagan Administration is trying to limit these programs. Congress has cut much of the funding for low-income housing projects, but a quirk in the 1981 tax act virtually guarantees that even without new funding the tax shelters will live on. Existing properties are now eligible for many tax benefits that only new construction used to get.

This opens the door for resyndication—selling the projects to a new set of investors. Of course, HUD must approve the transfers. But approval seems likely, and why not? Depreciation on projects is mostly used up after seven years, so new buyers can start the writeoffs flowing again. What's more, many FmHA and HUD projects have guaranteed subsidy payments that run well into the 1990s. "The law has made most subsidized housing more valuable to prospective buyers than to present owners," says David Smith, a Boston-based syndication expert. "Resyndications could become the dominant real estate tax shelter of the Eighties." ■

"Bank directors are damn fools not to have CPAs see that their financial statements are properly presented," says one exasperated Big Eight CPA.

Out of the frying pan?

By Robert McGough and Christopher Power

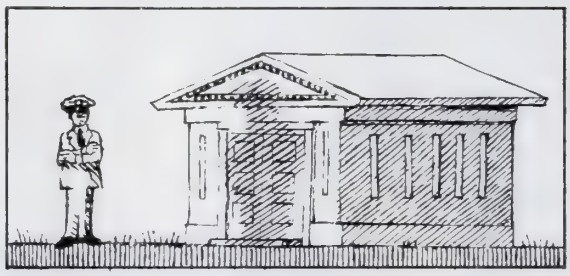
WANT A REAL SURPRISE? Here goes: Most of the 15,000 banks in the U.S. never have a full audit from a certified public accountant. It simply isn't required by banking regulators. And since most banks aren't publicly held by more than 500 shareholders, the SEC doesn't require audits.

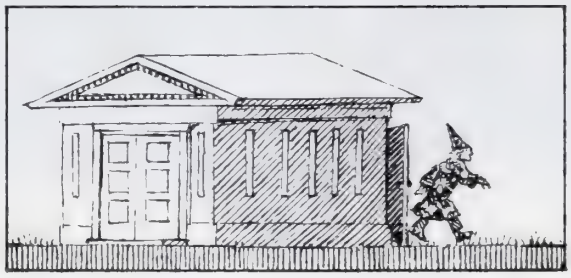
Soon, however, this situation may change—at least for the 4,600 nationally chartered banks. Comptroller of the Currency C.T. Conover is leaning toward requiring outside audits, and the increased complexity of banking added to the growing number of troubled banks is forcing a change. "Maintaining our current level of bank regulation is simply not an option," says Conover.

At first glance this sounds like good news. When intrastate banking was allowed in New York, for example, banks that acquired smaller, unaudited banks often found that they had to restate loan loss reserves. Accountants won't provide examples, but they say the same thing is happening now in other states where intrastate banking has recently been allowed. Many small banks still do their accounting on a cash, rather than accrual, basis, which gives them the ability to manage earnings.

Bank audits might also reassure uninsured depositors and lenders. "Corporate treasurers, who frequently have a fair amount of uninsured deposits in banks, are looking a lot harder at financial statements," says Tom Asson, Coopers & Lybrand partner for bank auditing and the chairman of the AICPA's banking committee. "They're not just looking for the best interest rate."

Naturally, most CPAs hesitate to criticize regulators' current work. That seems self-serving. But one Big Eight partner, who did not want to be identified, says bluntly, "Bank directors are damn fools not to have CPAs see that their financial statements are properly presented."





Just how much better accountants will handle this tricky task, however, remains to be seen. Think of Penn Square and United American Banks. Both had had recent outside audits. And accountants issued clean bills of health just before disaster struck.

Unfortunately, when bankers are pushed to the wall, they have a large bagful of tricks to make things look better. These can fool even the cleverest auditor. Here's a peek into the bag:

- Bankers can renew a loan that is not performing well and add the unpaid interest into the new loan; it looks for all the world like a bigger, better deal.
- Reserves for loan losses, normally at about 1% of assets, can also be adjusted to hide earnings growth or offset a drop in income.
- If a banker can't hide a loan in his own books, he can try to spirit it away. Some bankers have been known to sell problem loans to other banks before annual examinations. A couple of months later, they buy them back. This works especially well with a group of commonly owned banks, a ploy analysts say the Butcher brothers were using in Tennessee. Why does the receiving banker go along with such a deal? Says Laventhol & Horwath's Donald Garrison, "Because next year *he* might need the same favor when *his* auditors come in."

If all this isn't enough, there's a brand new area for potential abuse, ordained by the SEC. Until this year, banks reported a net operating income and a separate figure for gains and losses from security transactions. Now they will report a single figure that includes the net from both operations and transactions—ostensibly in order to make bank earnings statements comparable with those of other publicly traded companies.

That's fair enough. But the analysts see it as a chance for banks to massage the earnings from operations with the losses and gains they get from securities transactions. Those transactions will sink out of sight, while the consolidated earnings figure will reflect less and less the quality of the bank's real business as a bank.

This new latitude in reporting the securities transactions might give the banks the ability to sway earnings by as much as 5% when interest rates are volatile. That doesn't sound like a lot, but a bank's equity can be as little as 2% to 5% of total assets, so that can make a big difference.

Obviously, some CPAs are rejoicing at the prospect of a major new source of business. But with all the land mines ahead, maybe they shouldn't be so happy. ■

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France and Sweden are turning to venture capital and new-issue markets.

A touch of capitalism

By Lawrence Minard

SCENES FROM THE revolution: On Jan. 26, a little over-the-counter technology company, 3-K, issues its first shares to the public. The issue is oversubscribed 100 times. Priced at $6.60, the shares quickly rise to $43—48 times projected earnings. A few weeks later another little company, a commercial caterer named Sodexho, goes public over-the-counter at $216. Demand is so heavy that Sodexho can't open for three days, and finally does so at $250.

This action wasn't on Wall Street. 3-K went public in Stockholm, Sodexho in Paris. Stockholm? Paris? Aren't they bastions of Socialism? They are. But in both countries the Socialists are going after the entrepreneur—not to jail him, as in the Soviet Union, but for help in getting their bureaucracy-ridden economies moving again. In both countries, Socialist governments are actively promoting U.S.-style, over-the-counter markets—called the OTC Börsenin Sweden, and the *second marché* in France.

"We believe the encouragement of smaller companies is the only real way to solve our problem of structural unemployment," says Claire Dreyfus-Cloarec, who watches over capital markets for France's Treasury.

The markets are only a few months old and still tiny. The three companies on the Stockholm o-t-c boast a combined market capitalization of just $19 million *(see table)*. France's *second marché* is composed of 23 companies, but only 2—Sodexho and recreational boatmaker Zodiac S.A.—have joined since the *second marché* was formally launched in January. (The other 21 shifted to the *second marché* from the unofficial market of the Paris Bourse, France's equivalent of New York's Big Board.) But, says Richard Lonsdale-Hands, a broker for Paris' big brokerage firm Michel Nouailhetas: "The government is pushing the *second marché*. I think it will be a very big deal."

How does President François Mitterrand's government reconcile enthusiasm for venture capital with Socialist ideology? No big problem for these intellectuals. They rationalize that the *second marché* helps decentralize the French economy. But hundreds of vibrant, small Gallic companies need no such ideological justification. Yves Flornoy, chairman of the French stockbrokers' association, thinks there are as many as 600 small French companies that may join the *second marché* in the years ahead. These family-owned companies have sales of around $50 million; are growing at 20% annually; have shareholders' equity in excess of $15 million; and earn better than 15% on capital.

But there are clouds. One is market depth and breadth. Owners need sell only 10% of their equity to get a *second marché* listing—compared with 25% for a company listed on the Bourse. So, floats on the *second marché* will remain dangerously thin. Says Marie Voûte, a top Paris-based money manager and head of Capital Management France: "The issues are tiny—just 45,000 or so shares from Zodiac.

The start of something beautiful?

There is but a tiny handful of new entries in the French and Swedish over-the-counter markets. But financiers in both countries expect the number to rise in the year ahead.

Company	Country	Business	Shares outstanding	Shares in public hands (%)	Offer price	Recent price	Recent P/E	Sales (millions)
Artin Kores	Sweden	office supplies	360,000	40%	$10.70	$30.00	12	$21
3-K (Tre Konsulter)	Sweden	applied signal analysis	209,000	17	6.60	22.85	26*	3
Sporrong	Sweden	metal sales promotional items	300,000	33	2.86	17.15	10*	13
Sodexho	France	commercial catering	356,000	23	216.00	286.00	11*	382
Zodiac	France	recreational boats	352,000	13	79.00	110.00	9*	80

*Based on 1983 projected earnings. Prices based on $1 = 7 French francs = 7 Swedish kronor.

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And when shares do appear, they quickly disappear again into the hands of the institutions. So the public isn't involved. There's no liquidity, nothing to trade."

A larger and more ominous cloud is the government's ambivalence. Mitterrand's Socialists reduced capital gains taxes to a uniform 15%, with no minimum holding period. But they offset that sensible move by boosting top personal income tax rates from 50% to 65% and adding a 10% surcharge on taxes paid. Most devastating, they introduced a wealth tax: 0.5% on personal net assets worth more than $430,000, rising to 1.5% on assets over $1.4 million. In short, the government is yet to demonstrate that its commitment to the entrepreneurial spirit is wholehearted.

With the wealth tax, the Socialists have created a Catch 22: On the one hand, the wealth tax could force many family-owned companies onto the *second marché* in order to raise funds to meet their wealth tax bills. On the other hand, the wealth tax will discourage well-heeled investors from buying. Confides a well-known Paris money manager: "Now that we have a wealth tax, the game has become keeping your wealth invisible." It is a game that history has taught the French people to play skillfully.

The tax situation in Sweden is even worse. Sweden's corporate profits tax rate is 58%. The top income tax rate for "rich" Swedes, those earning over $43,000 a year, is 85%. That means a Swedish company must earn $16, pretax, in order to pay out $1 in aftertax income to a well-heeled investor. It gets worse. The Swedes also have a wealth tax to pay: 1.5% on net assets over $57,000, rising to 3% on personal assets over $260,000.

Consider what this level of confiscatory taxation means for companies' ability to attract public equity. Suppose you're a wealthy Swede with 1,000 shares of Volvo in your estate. At current prices, the block is worth $68,000. The annual wealth tax (payable in aftertax money) on the holding is $2,040. So Volvo must earn $33,000, pretax, to deliver you enough aftertax dividends just to pay the government for the privilege of owning the shares! If you are a Swede, far from being able to support you, your capital can barely support itself.

Big companies like Volvo can survive. Their shares are owned mostly by institutions, which pay no taxes. But small, family-owned companies find it virtually impossible either to retain earnings or to attract outside equity capital. Thus they cannot grow and create new jobs as small businesses can and do in the U.S.

This is where Sweden's new over-the-counter market comes in. Thanks to legislation passed last year under Sweden's first postwar non-Socialist government (Olaf Palme's Socialists returned to power last September), family-owned and over-the-counter companies received healthy tax breaks. For one thing, they can now deduct up to 70% of dividends paid from corporate income taxes. But the biggest break is on wealth taxes. For family-owned and o-t-c companies, the legislation said that wealth taxes would be levied only against 30% of the book value of the company, rather than 100% of the market value—a significant incentive to invest in small companies since Swedish company book values are almost always less, and usually far less, than market values. Take Urban Harting, for example, who runs Artin Kores, an office supplies maker. He says his company's book value for wealth tax purposes is just $3 a share, vs. a current market price of $30.

Put it this way: A $10,000 stake in Volvo would be wealth-taxed at $300 annually (for wealthy Swedes), whereas a $10,000 holding in Artin Kores would draw a wealth tax of less than $40. Among other things, this highly sensible tax treatment allows founding families to maintain control over their companies.

More importantly, it is stimulating the entrepreneurial juices of the country's hitherto rather listless businessmen and financiers. In the last six months a dozen venture capital pools have been formed. Peter Gyllenhammar, a bright young investment banker at Stockholm's big brokerage house, Hägglöfs, and a few friends will soon ante up around $1.5 million to back young computer-technology-minded Swedes importing U.S. computer knowhow. "Without the OTC," says Gyllenhammar, "we wouldn't have stood a chance."

The danger is that Palme's Socialists may well decide that the tax breaks for small companies are too generous. "Sure, the government wants to increase manufacturing profits and create more jobs," says Bengt Grönquist, the governor of the Swedish Stock Exchange, "but they have a problem: The Socialists want healthy companies, all right, but they don't want their owners getting rich."

Michel Nouailhetas broker Richard Lonsdale-Hands
France's second marché "will be a very big deal."

Baron Johan Nordenfalk, a businessman and public servant whose committee report paved the way for the small company tax concessions, is cautiously optimistic. "Not counting farms and inactive companies, Sweden has over 200,000 businesses—one for every 42 Swedes," says Nordenfalk. "There is suddenly a very positive psychological mood among these small businessmen. And I believe the government recognizes the importance of this mood."

It's a confusing problem for the Socialists. Either they permit entrepreneurs to grow and become rich or they watch their economies stagnate. In the latter case, they risk losing power. And the Socialists talk about the "contradictions" of capitalism! ■

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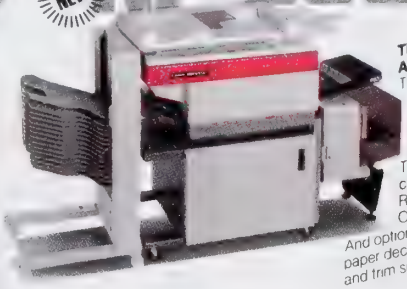

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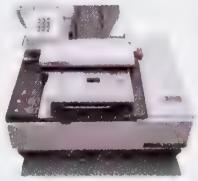

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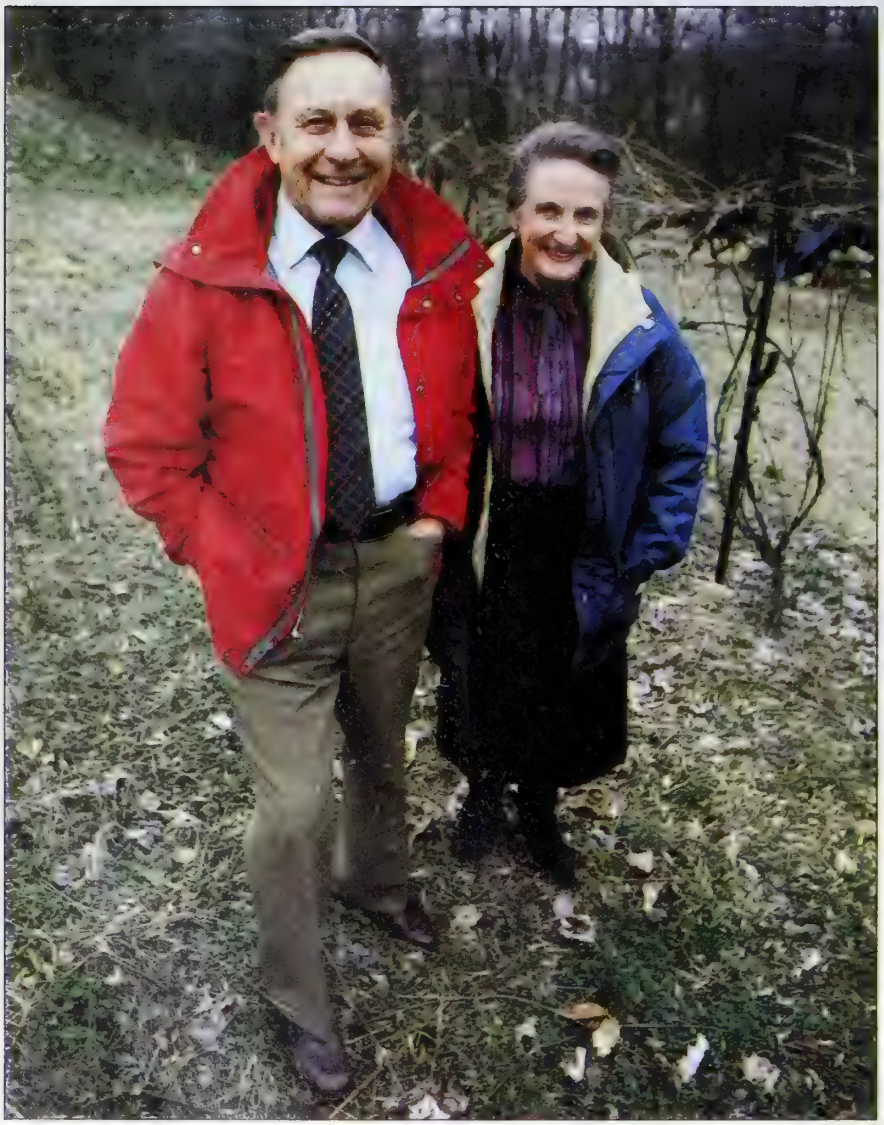
Bill Gore tried to succeed in business by starting a company with no bosses and no titles and no employees—only "associates." Guess what? He did it.

Classless capitalists



Gore Associates founder Bill Gore and wife, Vieve
His Gore-Tex polymer was a winner.

By Stanley W. Angrist

When Wilbert L. Gore quit Du Pont after 17 years of service in 1958, his friends all said he was crazy. Gore was up for a big promotion, and as a 45-year-old research chemist with two children in college, he needed it. He was leaving the security of Du Pont, moreover, for the exceedingly risky prospect of starting his own business. But his wife told him, "Bill, go ahead and quit. If you don't try this now, you will always be sorry."

Sounds straight out of a television drama, and, of course, you already know the ending. It's a happy one. But Bill Gore's success story has a twist. On one level, it's the story of a successful product, the famous Gore-Tex plastic insulation that W.L. Gore & Associates developed and marketed. On another, it's the story of a managerial innovation that goes way beyond Japanese quality circles.

Gore employs 3,000 people without a hierarchy. For legal reasons, the company must title its officers, but chairman, president, vice president and secretary-treasurer are the only titles that exist. At Gore, everybody is an "associate." The surprising thing about such organization, or lack of it, lies not in its novelty—it has, after all, been attempted by other businesses, with mixed results—but in its success at Gore. It really works. "They are the brightest, hardest-working people I have ever seen anywhere," Gore, now 71, says of his associates. In fact, he attributes the company's spectacular success to his "lattice" organization and to luck.

Management professionals can't quite believe it. Paul Goodman, professor of industrial administration and psychology at Carnegie-Mellon, thinks lattice organization is fragile and ephemeral. "In practice," he says, such groups "frequently don't turn out to work very differently from hierarchical ones." Gore associates vigorously dispute any suggestion that the method doesn't really work at Gore, however.

Headquartered in the old Quaker stronghold of Newark, Del., Gore commands a world market in a polymer called polytetrafluoroethylene, or PTFE, which Du Pont had patented in 1937. You may know the stuff better as Teflon. Gore turned the Teflon polymer into a fiber, in many respects the ultimate synthetic fiber, impervious to sunlight, chemical degrada-

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tion, heat and cold. Astronauts wore space suits woven of Gore-Tex fiber, but the big market was found outdoors, in high-quality tents, sleeping bags, gloves, ski clothes, boots and other products that are fabricated by more than 125 manufacturers around the world.

Gore-Tex structures also go into antipollution filters, on electrical cables and, as synthetic vascular grafts, right into the human body. In the future, Gore-Tex structures in the form of film may separate salt water from distillates in desalinization.

Still the controlling shareholder in his family-held concern, Bill Gore can get along without publicity or underwriters. But he does say that Gore's sales this year will run between $140 million and $170 million, maintaining a yearly growth rate of 30% to 40%, and pretax profits will exceed 20%. Unburdened by public shareholders, Gore remains free to run the business as he sees fit. That's one reason his lattice organization has been able to stay in place. Gore is a skier, a backpacker and something of an organization philosopher as well. He laces his talk with observations on the "nature of man" and the "nature of groups." Groups respond to a recognized authority, he says, or to individual commitment. "If you are going to have a lot of change in an organization," he says, "you better get a commitment. In the process, natural leaders will evolve."

Gore's new associates come aboard on recommendations from already employed "sponsors." That helps guarantee success of the system. The sponsor helps determine a recruit's salary. Sponsors compete for the best recruits. Gore believes that the system can work in groups of no larger than 200 or so. In larger groups, he says, individuals lose touch with each other. To limit working groups to 200 has required the building of many small plants. Gore now runs 23 plants and will have 28 up by the end of the year. Gore can afford to build a number of small plants because productivity, Bill Gore says, is probably double the productivity of an average manufacturing work force, and creativity is probably triple. Gore associates turn out new inventions at an astonishing rate.

Some Gore associates say the system succeeds largely because of the relationship between Bill Gore and his son, Robert, 45, president of Gore. (Bill Gore's wife, Vieve, 70, is secretary-treasurer, and Bill Gore is chairman.) Peter Gilson, an associate who would be called director of the fabrics division if Gore had such a title, says Bill and Bob Gore are the smartest people he has ever met in his 20 years in fabrics. Bill Gore says, "When Bob and I meet in the hall we can transact in 15 seconds what others would take 15 hours to do. On the other hand, I am the everlasting optimist. Everything will turn out all right. Bob is the perennial skeptic. It is a very creative balance between us."

The Gores have become rich over the years, although they also have given away a fair amount of money and have shared profits with their associates, as might be expected. Now 90% of the stock is held by the family and its associates. As much as 15% of each associate's salary goes into an employee stock-ownership plan. In a strange way, through intensely profit-motivated capitalism, the Gores have realized an old Marxist ideal, eliminating the alienation between work and worker and giving the worker the fruit of his labor. But Gore's system is hardly one that is easily copied. To do so, he says, would require the self-conscious hierarchical authority that Gore, so far, at least, has managed to avoid. And, he says, you can only start a lattice organization from scratch. You can't make one out of an existing hierarchy. ■

The Up & Comers

Sam Moore is perhaps the premier Bible seller in America. Can he also make it in secular publishing?

Serving God and Mammon

By William Baldwin

PUBLISHING A NEW English translation of the Bible has been known to involve risk. For his unauthorized version of 1525, publisher William Tyndale was strangled and burned at the stake. Sam Moore, whose company has spent $4.5 million creating and another $1 million advertising its *New King James Version*, expects to fare better. In fact, he will probably recoup the investment within a year.

Moore, a 53-year-old Lebanese immigrant, is founder and chief executive of Thomas Nelson Inc., billed as the world's largest Bible publisher. In its fiscal year ended Mar. 31, the Nashville firm sold about $47 million worth of books, three-fourths of them Bibles, and netted probably $3 million. Quite an accomplishment in a mature industry. Tyndale's customers had no English Bibles, while most of Moore's potential customers already own at least one.

Nelson's Bible publishing revenues are treble those of second-ranking Zondervan Corp. But Moore's ambitions go beyond Bibles and other religious books, such as *The Secret Kingdom*, a bestseller by television preacher Pat Robertson. A year ago Nelson paid $1.8 million for Dodd, Mead & Co., the once-prestigious New York publisher of Churchill and Shaw. Nelson got in Dodd, Mead a business with no net worth and no profits on almost $4 million in yearly sales. Dodd, Mead's sales, in the first year under Nelson, have fallen to $3 million, and profits are still elusive. Yet Moore has hopes of transforming Nelson into a $500 million "avant-garde publisher" within a decade. There are those who lack faith in that revelation, but then they doubted Moore when he took Nelson public in 1962. The share price since then has experienced a rather startling ascension, shall we say, having risen thirtyfold.

Moore, who wears a beatific smile that seems never to leave his face,

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OH WHAT A FEELING!

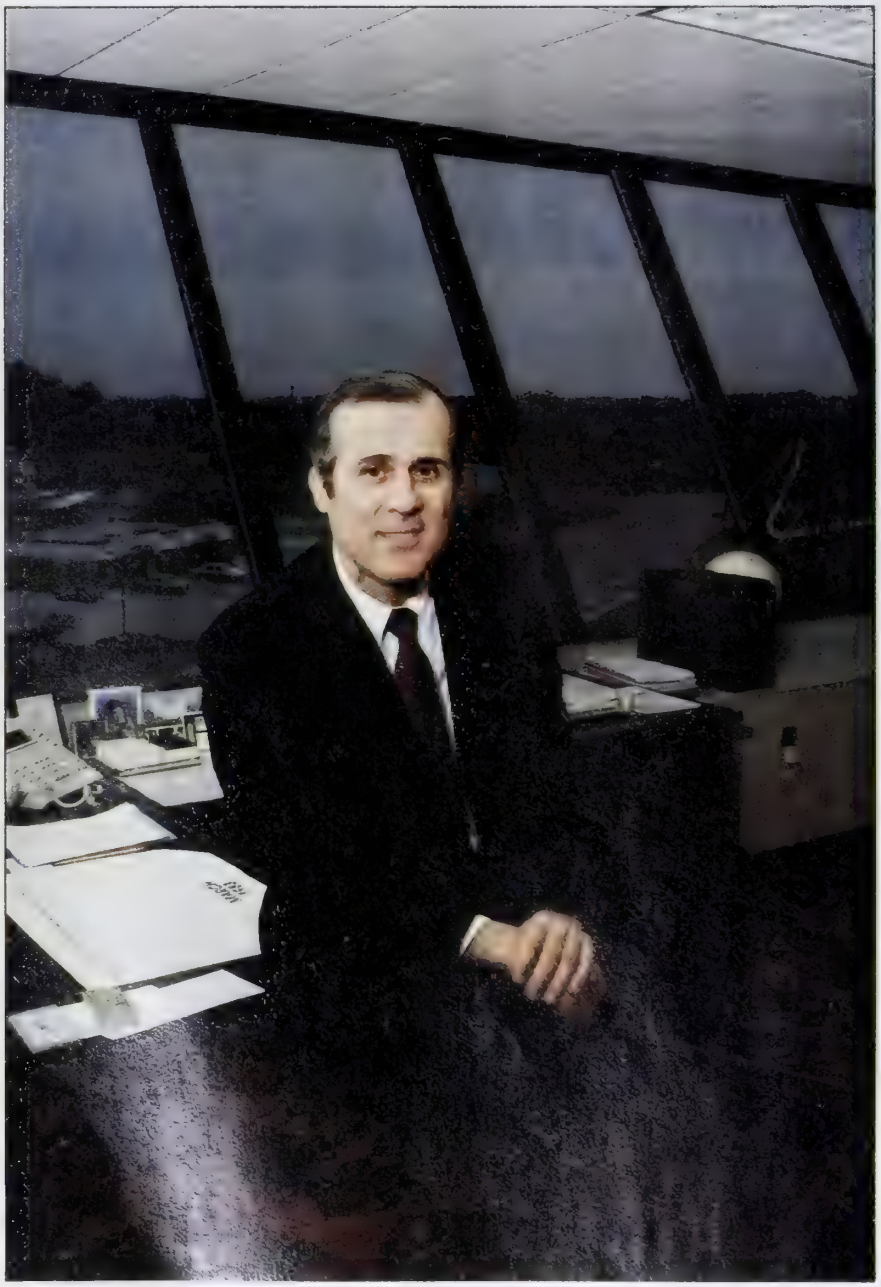
TOYOTA

CRESSIDA MOVES PROUDLY INTO THE GRAND TOURING CLASS.

calls himself a born-again Christian. He is also a born seller. "Winning," he asserts, "is a habit."

Moore came to the U.S. as a college student and took a summer job peddling Bibles and reference books. "I wanted to do God's will," he says. Evidently, God didn't will that Moore stay in New York as a Chase Bank trainee, the job he took after getting a business administration degree from the University of South Carolina. At 27, Moore headed back to the Bible Belt and started a door-to-door book distributorship in Nashville. Sales, helped by easy credit terms, exceeded $200,000 in three years. In 1962 Moore used a $264,000 stock offering to finance a traditional King James Version with such extras as a concordance. His publishing concern, Royal Publishers, lost $17,000 on sales of $126,000 in 1964. But it turned the corner and three years later earned $93,000 on sales of $1.2 million.

The world was changing, however. Door-to-door selling was dying. By 1968 Royal's bad-debt losses quadrupled, to 34% of credit sales. Salvation came in the form of the foundering U.S. operation of Thomas Nelson & Sons, a 170-year-old British publisher that sold through stores. Once a leader, with exclusive rights to the 1952 *Revised Standard Version* of the Scriptures, the U.S. subsidiary by 1968 was only breaking even on $1.4 million in sales. Royal bought the subsidiary, putting down $400,000 of the $2.6 million price and covering the rest with the subsidiary's $1.6 million in cash and with a note to the London parent.



Chairman Sam Moore of Thomas Nelson
"I wanted to do God's will."

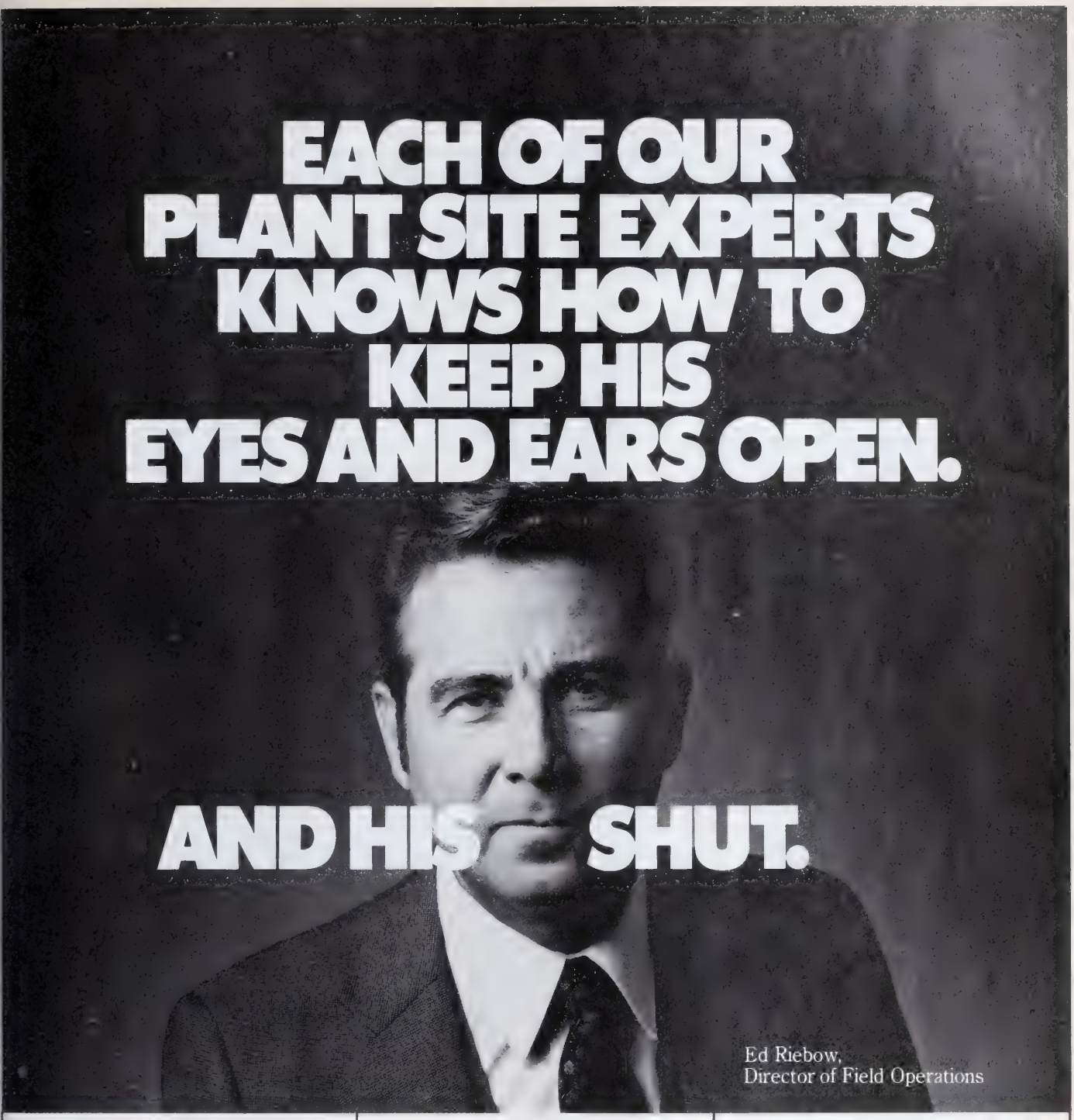
It was a big bite, overnight doubling the sales of Moore's company (which adopted its acquisition's name). But the combination allowed Moore to let door-to-door sales shrink to less than 5% of all sales today, while he applied slicker salesmanship to Nelson's staid bookstore line.

Packaging counts. "We're the only ones with *The Topical Chain Bible*," boasts Moore, "the only ones with *The Open Bible*." The chain Bible color-codes passages: yellow for Holiness, gray for Sin, red for Grace. *The Open Bible* offers "Christian-life study outlines, cyclopedic index, weights and measures, full-color maps and Interesting and Unusual Facts." All told, Nelson has 550 different styles of Bibles. That doesn't count custom-made, private-label Bibles for television evangelists. Nelson sold 200,000 Bicentennial Bibles to Jerry Falwell's organization.

Nelson's latest product coup required reediting the venerable King James Bible, first printed in 1611. The Nelson version, published in August, has sold more than 1 million copies. It updates thous to yous and firkin to 10 gallons, but retains most of the familiar wording of the original. The average specimen costs Nelson a bit less than $4 to have printed, sells to bookstores or to K mart for $8 and retails for $14.

Of course, competition exists. Five years ago Zondervan completed its $2.5 million New International Version, almost indistinguishable from the Nelson. But Arthur Farstad, a Nelson editor who defends his Bible at trade shows and on television broadcasts, cites chapter and verse to suggest that Zondervan strays, in the interest of readability, just a trifle from literal translation.

To some fundamentalists, that hints at heresy. Competition also comes from the 1982 *Reader's Digest Condensed Bible*, which omits the repetition and genealogies in the original. Farstad notes pointedly that Reader's Digest also left out that passage in Revelation threatening anybody who would subtract words from Holy Writ. These are more than theologians' quibbles. As Moore was aware when he chose *New King James*



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as the title for his edition, half of all Bibles bought today are the King James Version.

Moore's challenge now is to understand secular publishing and its six-figure bidding for big authors as well as he understands folks who buy $14 Bibles. He has tried to diversify before. He once had Bible revenues down to half the total, but the percentage crept back up after he sold a printing subsidiary in 1974 and a disappointing children's book division in 1978.

As for trade publishing, success here is easier to seek than to find. Elsevier, the Dutch publisher of technical and reference books, failed in its attempt to run E.P. Dutton. RCA could not make a fit with Random House. So Moore's fling with Dodd, Mead seems as ambitious as his takeover of Nelson 13 years ago. But Moore, predicting a 50% rise in Dodd, Mead sales this year, believes that God helps those who help themselves. "I work hard," he says. "I don't walk on water." ■

The Up & Comers

The analysts are cheering. The stock now trades at 30 times earnings, a 52-week high. So why is Vermont Research President Hugh Taft so concerned?

Trouble in Precision Valley

By Paul B. Brown

If we break even, it will be a terrific year." That's how Edward D. Winkler Jr., controller of Vermont Research Corp., sees fiscal 1983.

Hasn't Vermont Research averaged a 33% return on equity, with modest debt, over the past five years? Hasn't it made the Forbes Up & Comers list, which ranks high-performing small public companies, for the past two years? It sure has. The stock recently got a positive review from small-company stock picker John Westergaard, and it has more than doubled in price within the past year.

Yet sales dropped in the first half of fiscal 1983. The company lost money, and Vermont officials don't see any immediate improvement. The company can't escape the costs that are involved in continued growth, and so it has come to a critical stage. It has to change and diversify without going under in the process.

It was all much simpler 23 years ago, when the company consisted of three engineers, one of whom was a salesman. They had all worked for Bryant Grinder Co. of Springfield, Vt., which was moving to a Detroit suburb. Says President Hugh Taft, who was then 37, "Two of us were born in Vermont [the other in Maine], raised in Vermont and have spent our entire lives here. We didn't want to go to Detroit. Besides," he adds, "it served as a convenient excuse. We were ready to go out on our own."

So Taft and his colleagues sought out their neighbors, friends and friends of friends in Vermont and went public with their idea for a company called Vermont Research. They sold 10,000 shares at $10 apiece and used that $100,000 stake to compete with their former employer. Bryant made drum memories for computers. Vermont Research began making its version down the street from the old employer's place in Precision Valley, named for the precision metalwork that flourished there.

In the beginning Vermont Research was nothing more than a job shop. "Our second order from Digital Equipment Corp. reads in full, 'Order: a drum memory just like the one on purchase order thus and so,' " Taft says. After that, Vermont Research began improving its products and standardized the memory specifications, and "the business," Taft says, "took off."

The business—$13.5 million in sales last year—now lies in making rotating drum peripheral memories for computers. In the performance hierarchy those devices rank midway between faster semiconductor memories and slower and cheaper electromechanical memory products such as magnetic tapes.

Even in that slot, Vermont specializes. It concentrates on producing reliable, trouble-free memories to control things like manufacturing processes and telephone switches—24-hour-a-day jobs in which downtime is costly.

By 1981 the company dominated its tiny, $50 million market. Sales peaked that year at $16.3 million and margins at 16.5%—nearly three times the computer industry's average.

But even then the market had begun to change. Industrial users started switching from the large mainframe computers that used Vermont's memories to small auxiliary computers. Because the auxiliary computers do less work, their memories needn't be so fast or reliable. Cheaper disk memories, at $3,000 each, began replacing Vermont's $12,000 to $15,000 drum memories. But Vermont kept pushing to expand its drum business.

Eventually its customers forced its move into disks, but by that time Control Data, Xerox (through its Century Data Systems division) and four others had firmly established themselves in the disk market.

And that's why Vermont has come to its critical stage.

But critical doesn't mean it's all doom and gloom in Precision Valley. The pie, for one thing, is bigger. The market for drum memories is $50 million or so a year, while some $600 million in disk memories are expected to be sold in 1984. Vermont knows some of the likely customers who, after all, have been Vermont buyers in the past. And, once again, in the disk market as well as in its old drum market, Vermont will specialize.

"Our disk will be able to withstand more shock and wider temperature ranges," Taft says. "And it will not be as easily affected by dust and other contaminants."

The Vermont disk, when it hits the market this summer, probably will cost more than its competitors', some

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10% to 15% more than, say, a Control Data disk. "Again, the question is, has Vermont Research gone after a market niche that is so narrow that we are limiting ourselves?" Taft asks. "We honestly don't know. In six months or so we will have an answer, but right now we don't."

Taft is unhappy with such uncertainty. Although the best guesses put the disk market at unit sales of 200,000 in 1984, which yields that $600 million potential sales figure, things are far from certain. Most of the 2,600 companies that install office computer systems are Vermont's potential customers. But the majority of those firms have fewer than 20 employees and have been in business for fewer than five years. For a premier emerging growth company to depend on that shaky a market is, understandably, unsettling.

But Taft insists that the decision to pursue the disk market won't risk the survival of the company. It is true that research and development spending has increased fivefold since fiscal 1979, to $1.5 million a year. But cash income finances part of that, and the rest of the money has come from an October 1980 stock offering. The stock then was trading at nearly $31 a share. It now sells around $17 a share. While the money languished, Vermont invested it in Treasury bills, which produced about half its income last year.

But what if, when the money is finally gone, Vermont has failed to entrench itself in disks? "Well," Taft says, "there will be some kind of market there." And, he says, Vermont will simply have to adapt its disk to that market. Or live on its $10 million a year in drum sales. He pauses for a moment. "But just suppose for a moment that the 200,000 unit figure is right, and that we can grab just 2% of it. We would double the size of the company."

That's the way it really shapes up: big risk, big reward. But the current optimistic forecasts by the market may prove to be fanciful. Speculators in the stock are hoping for a short-term play that may not occur. For fiscal 1984 and beyond, Vermont's future remains pure guesswork. Says Taft, "It would be nice to think that Vermont Research could become a force in the disk market." But wishful thinking isn't staying power in the increasingly competitive world of computer technology. The market will have the last word.

Vermont Research President Hugh Taft
"We didn't want to go to Detroit. We were ready to go out on our own."

"Invest in taxes"

It's not exactly cheating, a good many owners of closely held businesses insist, so if you can reduce taxes by goosing your depreciation or charging the company for car expenses, country club memberships and dining out without clearly generating income, who but Uncle Sam gets hurt?

The owner, that's who, says Arthur H. Rosenbloom. The damage comes not merely in a civic or moral sense but in hard cash, when the owner decides to sell his business.

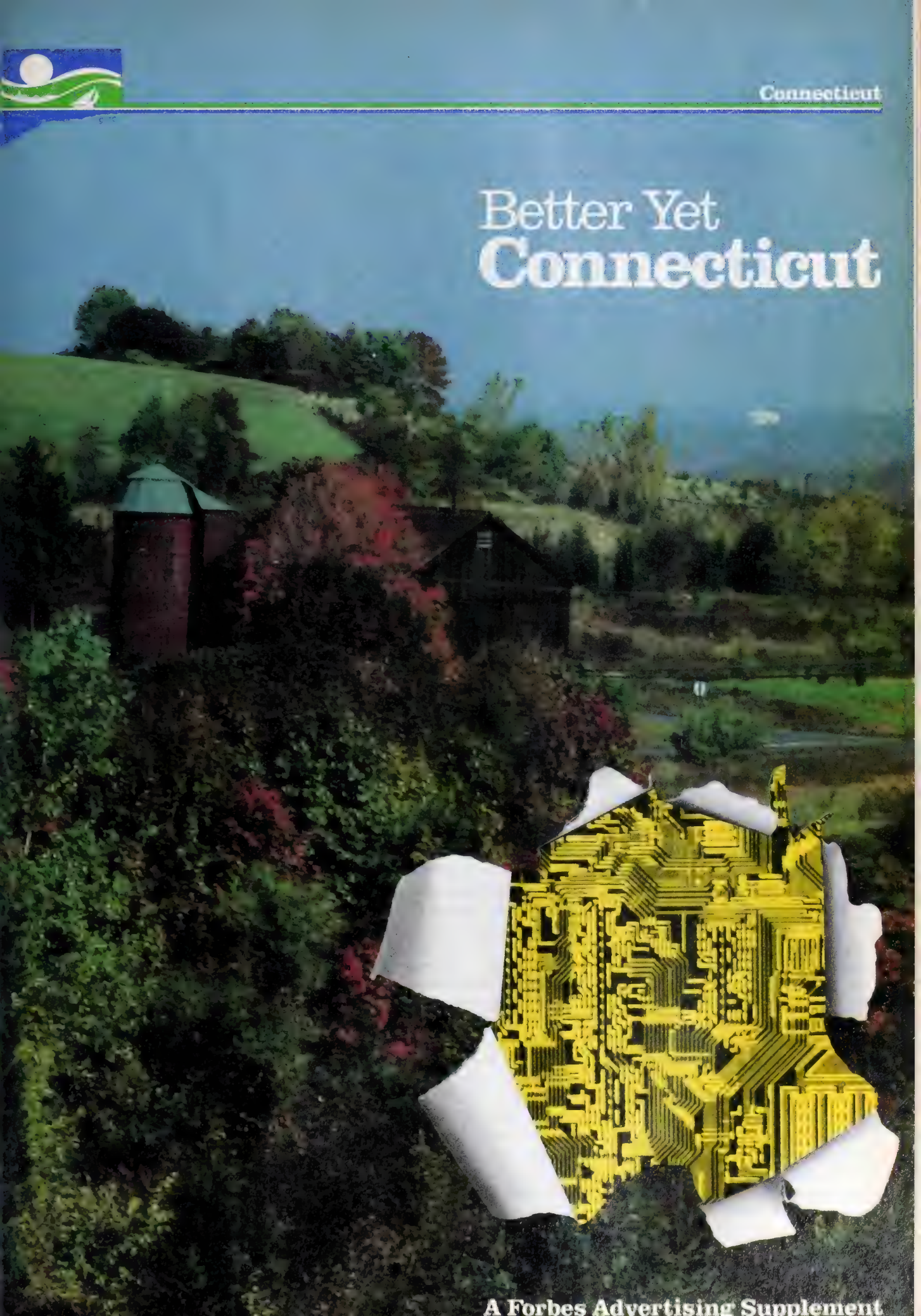
Here's how. "Let's say the business has sales of $10 million and the owner is reporting $1 million of taxable income," says Rosenbloom, executive vice president of MMG Capital Corp., a New York firm that does merger and acquisition work. "A buyer comes along and says he will pay 10 times earnings for the business and offers $10 million. The owner complains, saying, 'Look, if you took out my entertainment expenses and the like and slowed down the depreciation, the business would be netting much more. It's really earning $1.3 million, so it's worth $13 million.' "

That's like saying the horse's teeth wore down because he's a great biter, and the buyer senses weakness. He haggles over price. Often the deal stalls and dies.

"I always tell sellers to invest in taxes," Rosenbloom says. "Report the extra income. If you reported the extra $300,000, it would be worth $3 million to you when you sell, assuming the 10-times-earnings multiple."

For the businessman with no intention of selling, of course, maximizing taxable income makes for higher taxes. But also fewer sleepless nights.—**P.B.B.**

Better Yet Connecticut



A Forbes Advertising Supplement

O'Neill Is Top Salesman

Commitment to Jobs

As a former small business operator in Connecticut, State Governor Bill O'Neill recognizes that jobs are not created by governors, but by private enterprise.

That is why, Governor O'Neill says, he makes it his business to act as a catalyst for job creators in Connecticut. He feels it is one of the best ways, as Connecticut's chief executive officer, that he can be effective in his role as the guardian of the public trust and welfare. "Without a healthy economy and jobs to support our families—to give us all a sense of self-esteem and accomplishment—our state cannot grow and prosper."

It is for this reason that the Governor, as head of Connecticut's "Development Team," has worked for the past two years to help build and maintain a strong economic climate in the state.

And, strong it is.

Connecticut today has a widely diversified economy that draws its strength from a rapidly expanding "home grown" industrial base, a flourishing service sector, a growing affinity with the international marketplace, and from the hundreds of new companies that continue to move to Connecticut.

Connecticut is consistently outperforming the national economy on all fronts, with an unemployment rate that has been well below the national average for more than five years. In 1982, Connecticut's jobless rate was lower than that of 41 other states, including all of the industrialized states in the country.

The economy continues to produce the second highest per capita income in the United States, and is riding a crest of commercial construction and revitalization in its cities that promises a bright future.

Governor Bill O'Neill is Connecticut's top salesman. He heads the state's "Development Team" administered by Economic Development Commissioner John J. Carson (center) and Deputy Commissioner Peter F. Burns (right).

"Yankee determination and ingenuity have helped make Connecticut and the rest of New England more resistant to recession than at any other time in our region's modern history," says Governor O'Neill, who is also chairman of the New England Governors' Conference.

The state has thrown off the yoke of dependence on some of its older basic industries, but has reaped the benefits as many of these old-line companies have won the battle with economic evolution and have carved out specialized niches within new-found areas. Connecticut has also drawn back the curtain to reveal a sophisticated community of high technology companies and corporate offices, which has been quietly percolating and producing new jobs. With firms such as Combustion Engineering and Champion International in Stamford, and Heublein in Farmington, the expansion goes on.

The diversity of Connecticut's business activity, from insurance to machine tools to fiber optics, and the subtle transformations taking place, have been stamped indelibly into the economic fabric. Added to its traditional industries, the state today can boast a larger percentage of manufacturing workers in advanced technological fields than any other state except California.

These diverse economic sectors are held together by what Governor O'Neill refers to as Connecticut's "unparalleled quality of life." This is an atmosphere that has been made possible by a rich and historical industrial tradition, by a deep-rooted cultural and work heritage, by a population of men and women known for their pacesetting qualities, and by Connecticut's natural recreational advantages and widespread scenic beauty.

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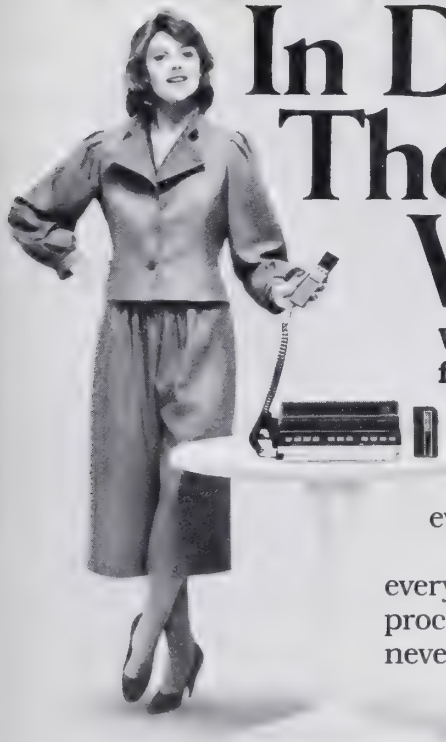

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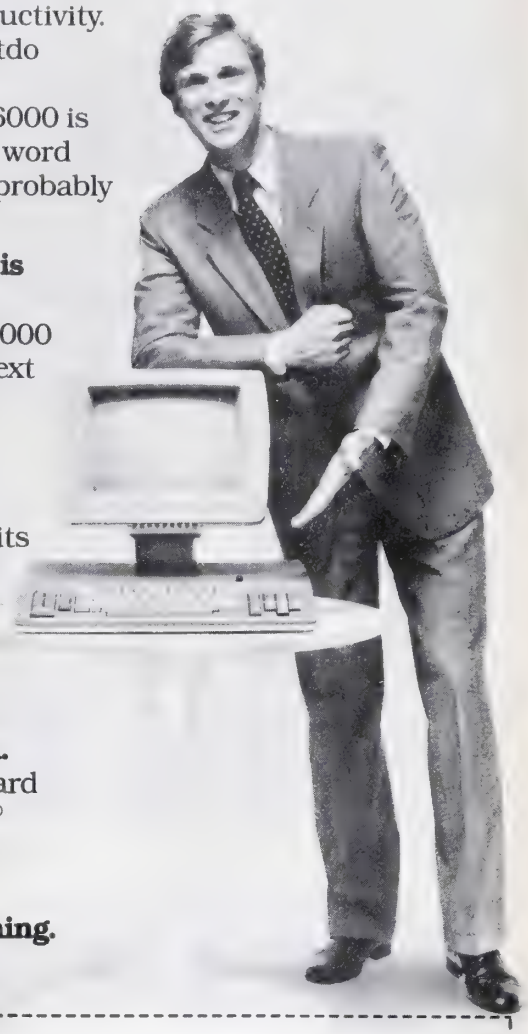

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- Home of nearly three dozen of the largest industrial corporations in the world;
- A center of invention, with more patents per capita than virtually any other state;
- An exporting powerhouse, with strong ties to the international economy;
- A reinvigorated center of tourism, which has become year-round instead of merely summertime; this has developed into a $2-billion-a-year activity.

While all that may add up to a highly marketable economic climate, Connecticut doesn't wait to be asked about it. And Governor Bill O'Neill has not become the state's top salesman by sitting behind his desk all day.

Connecticut is a small state on the east coast. It is within easy reach of major U.S. and Canadian markets.

The Governor regularly meets with corporate chief executives and visits business owners throughout the state to let them know Connecticut is eager to assist them as job creators. He has involved business leadership in his efforts to encourage higher education to be more responsive to employment needs. Some of the state's key industrial and financial leaders assist Governor O'Neill's economic development efforts through the nonprofit Connecticut Economic Development Corporation, the first organization of its kind in the United States.

Governor O'Neill travels outside Connecticut to promote the state to executives and organizations in a position to influence plant location decisions. He has scoured Paris, London, and Frankfurt for overseas sources of investment and jobs.

"It was the Governor's involvement that tipped the scales in favor of Connecticut," says Anthony Robinson of Bolmet, Inc., a newly-formed subsidiary of a French firm which treats paper for the electronics industry. After meeting with Governor O'Neill in Paris, the company's owners decided to build their new plant in the town of Killingly in northeastern Connecticut.

To build upon Connecticut's existing economic strength, and to prepare the state for the future, Governor O'Neill has initiated a high technology strategy covering venture capital, new technical school equipment, research grants, scholarships, and job retraining programs. He has also formed a Connecticut High Technology Council involving business, labor, and education to help chart the state's future technology and development. Lieutenant Governor Joseph J. Fauliso is chairman of the new council.

Supporting the Governor is an aggressive Department of Economic Development, which, over the past eight years, has built a powerful arsenal of development programs and incentives.

"Our aim is to give backup to the job creator on an ongoing basis," says Economic Development Commissioner John J. Carson. "But the job would not be possible were it not for the strong support and direction we get from the top. Governor O'Neill recognized early in his administration that a healthy economy would continue to be the key to a superior quality of life for Connecticut residents. He has made it clear that that is our mission."

Connecticut is a leader in the production of transportation equipment, which includes helicopters made by Sikorsky Aircraft in Stratford.

Carson says the Connecticut General Assembly has also made a commitment to jobs through innovative development programs including the first state-funded venture capital agency in the nation, and the pioneering urban enterprise zones, which are just starting. The legislature has eliminated sales taxes on new machinery and equipment, has phased out all taxes on wholesale and retail inventories, has instituted major manufacturing tax abatements, and has established innovative business tax credit programs pertaining to such areas as day care and apprenticeship job training.

"Development in Connecticut is a team effort," Carson says, adding that the small, manageable size of its state government facilitates discussions among commissioners of different agencies as well as with local government officials. "All agencies, whether Environmental Protection, Transportation, Labor, or Agriculture, work very closely with us to insure a balanced, and responsible, expansion of our economy."

982 Champion International Corporation

Champion is planting seeds for the future.

Subject: Seeds of thought.

Champion is a forward-looking forest products company. We have to —because the seeds we plant in the ith now will take anywhere from 25 50 years to mature.

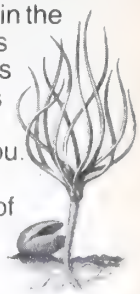
Think of that for a moment. The es we plant today and the products will make from them—wood building terials for construction, paper for mmunication, packaging for shipping d selling—won't "happen" until some-e between the year 2008 and 2043. you know of any human economic ivity that is as long-range as that?

So the very nature of our business makes us take the long view. It makes us think a lot about the future—the future of our company and, because the two are bound so inextricably together, the future of our society as well.

You may have noticed some of our magazine advertisements on ideas about what the future may hold. Ideas like extended life spans, personal privacy in the age of information, human engineering, the frontiers of the ocean and space, and educating our children to be able to make a living in a rapidly changing technological world.

As a company, we like to think our eyes are fastened on the future, while our feet are planted firmly in the here and now. Being in this business of planting seeds for the future—both seeds of trees and seeds of thought—can do that to you.

Champion. The forest products company of the future.



Champion
Champion International Corporation

An International State

Jobs From Around the World

More than 150,000 Connecticut workers owe their jobs to the international marketplace. Not only does Connecticut receive a significant share of the overseas manufacturing investment coming into the United States, but it is also one of the most export-dependent states in the nation.

An estimated $5 billion worth of manufactured goods leaves Connecticut annually for other countries. This activity directly and indirectly impacts an estimated 120,000 workers in the state.

In addition, Connecticut is today the home of approximately 225 overseas companies which employ some 30,000 residents of the state.

Overseas investment has become such a normal part of the state's economic existence that many people are unaware of the international ties among companies. Miles Laboratories in West Haven is German-owned, as is Royal Business Machines in Windsor, a longtime Connecticut company which has become Volkswagen's chief non-automotive business activity in the U.S.

North American Philips Corporation, the U.S. arm of the giant Dutch multi-national, has become one of Connecticut's largest manufacturing employers, with some 3,000 workers. Included is the corporation's Consumer Products Division (Norelco), which moved its corporate headquarters two years ago to Stamford. Norelco President Richard Kress had, years earlier, exhibited vision and imagination by locating a Norelco coffeemaker plant in charming and quaint Essex, on the Connecticut River.

While some of the overseas firms are consumer-oriented, the vast majority are manufacturers of electronic controls, components, instruments, and industrial machines. Some examples: Maho Machine Tool in Naugatuck and Index-Werke in Shelton, both from Germany; SPM Instruments of Sweden in Marlborough.

About a dozen overseas firms move into Connecticut each year. While most of the activity has traditionally come from Europe, new business is beginning to arrive from Japan. Honda America, for example, will soon open its new Northeast parts distribution center in Windsor Locks. Nitsuko America in Shelton began constructing an addition almost as soon as its first building was ready for occupancy.

Both the Conference Board and the Federal Reserve Bank of Boston have cited Connecticut as a leader in attracting overseas investment; this is especially impressive in light of the state's size.

To help maintain this momentum, Connecticut has two full-time staff people in Frankfurt, Germany. They not only promote Connecticut to European businesses, but they also act as liaison with Hartford to determine possible joint ventures and other trade leads between Europe and Connecticut.

Urban Area Incentives

Manufacturing continues to be the backbone of the Connecticut economy. The "Urban Jobs Program" provides inducements for a manufacturer —an existing as well as a new firm—to invest in the state's urban areas. The program's main purpose is to provide employment to the people who live in the cities and to help bring minorities into the state's economic mainstream.

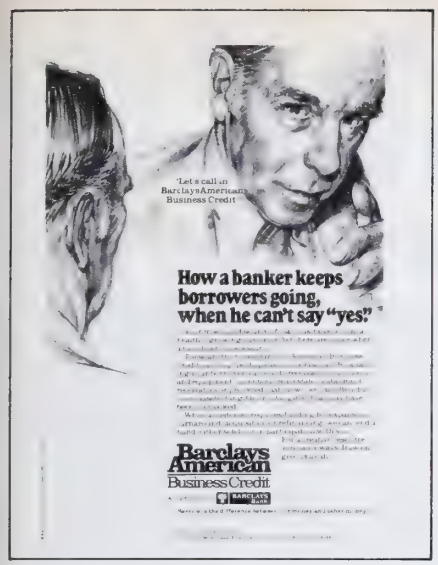
More than 300 manufacturers have undertaken projects in the state's urban areas. Together, these projects involve some $475 million and some 26,000 manufacturing jobs.

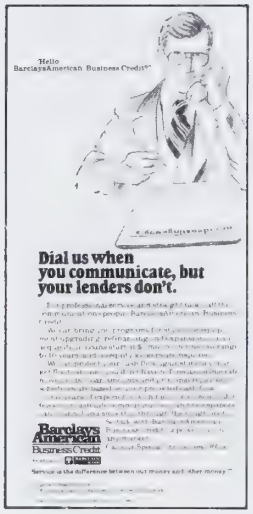
The incentives for a manufacturer investing in an "Urban Jobs" area:

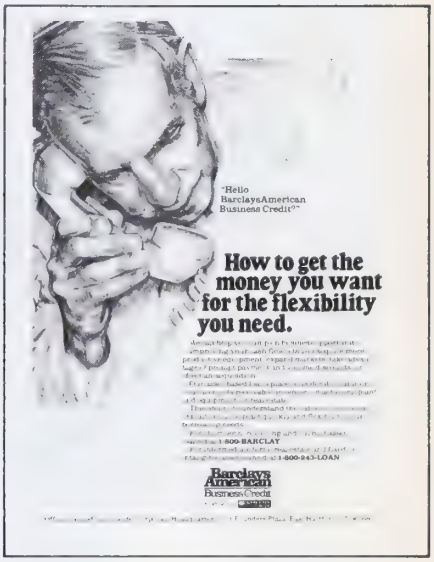
- 80% property tax abatement for 5 years;
- 25% reduction in corporate business tax for 10 years;
- $500 grant for each new job created;
- interest rate reductions in direct state loans.

There are 21 eligible areas for "Urban Jobs" incentives. They include major cities as well as other high unemployment areas: Ansonia, Bridgeport, Derby, Hartford, Killingly, Meriden, Middletown, New Britain, New Haven, New London, Norwalk, Norwich, Plymouth, Putnam, Stamford, Stonington, Torrington, Waterbury, West Haven, Willimantic, and Winsted.

In addition, Connecticut was the first state in the nation to establish "Urban Enterprise Zones." Special areas within six different cities offer an array of powerful tax and other financial incentives for manufacturing, commercial, and residential development. The six zones are in: Bridgeport, Hartford, New Britain, New Haven, New London, and Norwalk.







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PERKIN-ELMER

Technology Reflects Heritage

High Technology Breeding Ground

Even that entrenched symbol of industrial expansion—the ceremonial ground-breaking—must succumb to the march of technology.

Such was the case when Condec Corporation broke ground for its new Waterbury plant with the aid of a robot made in Danbury by Unimation, Inc., the world's largest producer of industrial robots.

The robot with a shovel was unusual enough but, when that magnificent combination of electronics and hydraulics raised its mechanical arms in salute to the audience, that typified the new technological age in Connecticut.

This is the state that supplied cannonballs and other staples to the Colonial Army, that inspired Eli Whitney's revolutionary system of interchangeable parts, and that fed the nation its supplies of brass, silver, rubber, and textile products.

But Connecticut today has expanded its rich industrial heritage and metalworking roots into the 21st-century fields of computers, optics, lasers, instruments, and biomedical chemicals and pharmaceuticals.

Contrary to the popular image, Connecticut is not just a collection of white colonial-style houses overlooking a town green. Connecticut can, indeed, lay claim to such picturesque scenes, yet it also ranks as one of the nation's leading industrialized states, with well over one-third of its work force involved in manufacturing. The state now has a larger percentage (26.6 percent) of its manufacturing labor force in high technology fields than 48 other states in the country. These are precision-skilled employees with an international reputation for turning out quality products ranging from microscopic chips to the most powerful and sophisticated jet engines in the world.

Mirror of NASA Space Telescope, made by Perkin-Elmer of Norwalk. Connecticut remains in the forefront of high technology development.

And most of Connecticut's high technology profile is "home grown." The state has long been known for its entrepreneurship and inventiveness, and has consistently ranked among the leaders in the number of scientists, industrial laboratories, and patents granted.

The high technology nature of Connecticut's economic climate is a logical extension of the quality that has characterized its industry since Colonial days. In a state almost devoid of mineral resources, it was inevitable that production would take the form of high added value from the application of skilled labor. Connecticut peddlers supplied the settlements with "Yankee notions"—tinware, pins, nails, anything made of brass. "Originally, we were the best brass makers and the premier clockmakers," says Commissioner John Carson. "Later, we put the turbine engines to their ultimate tests. We were constantly innovating, inventing new processes. Why wouldn't we be in the forefront of today's technology?"

The commonplace in Connecticut has attracted the attention of a technology-hungry America looking to New England for its formula for survival. It may be laser development from a Wesleyan-spawned Zygo Corporation in Middlefield; the nucleus of a fiber optics industry through Times Fiber and Galite in Wallingford; the conversions of old schools by electronics firms such as Control Module of Enfield; and growing economic might of such companies as Coleco Industries, the Hartford-based electronic toy manufacturer, and Southern New England Telephone Company of New Haven, which has taken the nation by storm with its new venture called Sonecor Systems; it may be Cambridge Research and Development Group in

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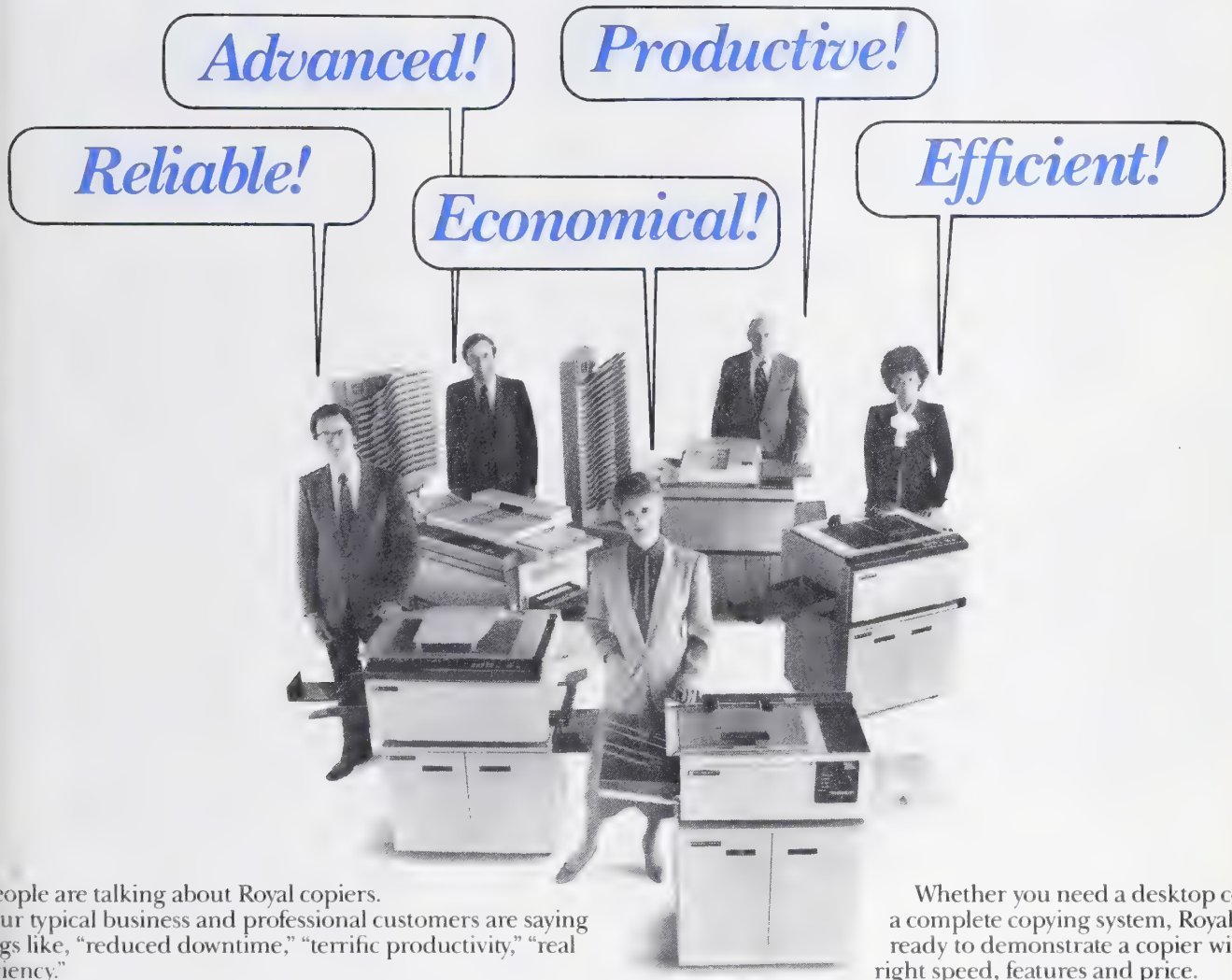

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A. 127 consecutive years.

Q. Who holds it?

A. Scovill Inc., Waterbury, Connecticut.

Q. What is Scovill today?

A. 6 Operating Groups that make brand name products with leadership positions in major world markets.

Q. What brand names?

A. Hamilton Beach. Yale. NuTone. Schrader Automotive. Schrader Bellows. Gripper. Names that speak quality in any language.

Q. Want facts?

A. Send for our 1982 Annual Report—it's fresh off the press.

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Westport, which seeks out and acquires new technologies and sets up companies to develop and market them.

Gradual transformations are taking place in some of Connecticut's oldest and most industrialized areas. Shelton in the Lower Naugatuck Valley, once known for its sponge rubber and primary metals, is now becoming an electronics and research center providing economic refuge for established firms such as ITT Telecommunications and for up-and-coming entrepreneurs such as TIE/Communications, Inc. Waterbury—"Brass City"—now has only one major brass mill left, but is attracting fast-growing electronics operations such as General Datacomm Industries. New Britain—the world's "Hardware City"—is still a hand-tool center, but is beginning to attract high technology firms, such as Selectro Corporation, which are influenced by the availability of a large skilled labor pool. Meriden—"Silver City"—may soon lose its last remaining flatware plant, but is undertaking its own transformation, with Insilco Corporation branching out into high technology fields and with the expansion of local electronics firm Canberra Industries into a near-empty downtown shopping mall. One economic irony is that the mall once was the site of the flagship International Silver factory torn down under urban renewal.

Eastern Connecticut was once a textile center and is today heavily dependent upon the submarine-building Electric Boat Division of General Dynamics. Technology continues to march ahead in the eastern counties: General Dynamics' computer center in Norwich; Electric Boat's planned new technology center in Groton; Pfizer's new $50 million research center in Groton. Longtime employers

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General Re Corporation is the parent ompany of General Reinsurance Corporation, \merica's largest reinsurer and third largest in he world.

General Re moved its headquarters to Greenwich, Connecticut in 1974. Since hat time,

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General Re stock is traded on the NYSE under the symbol GRN.

General Re

Greenwich, Connecticut

have helped lead the transition: Rogers Corporation is diversifying and expanding its plants throughout the region; Brand Rex is making new investments in Willimantic. In nearby Storrs, the University of Connecticut is preparing to develop a Research Park to attract new high technology development and provide for corporate-academic research opportunities.

The technological profile extends throughout the state. New Haven, with the innovative Science Park development avails itself of the resources of the State of Connecticut, the City of New Haven, Yale University, and Olin Corporation. Technology has helped turn Danbury from a "Hat Capital" to an "Electronics Crescent," where industrial robots and other innovations by National Semiconductor were born. To reflect its own diversification, United Technologies Corporation, for years the state's largest private employer, changed its name in the 1970's from United Aircraft. Longtime employer Perkin-Elmer, the national electronics leader based in Norwalk, and Stamford-based Pitney Bowes, the postage meter inventor, are now involved in leading-edge electronic technology. Both have plants throughout the southwestern Connecticut area.

In fact, high technology industries are the fastest-growing manufacturing sector of the Connecticut economy, outpacing all other industries by a four-to-one ratio.

Pharmaceuticals, medicinal chemicals, and other health care products are being made at an increasing rate in Connecticut, aided in part by the existence of two leading medical schools, Yale University in New Haven and the University of Connecticut in Farmington. Boehringer-Ingelheim Ltd. renovated an old school in Ridgefield and has since expanded into a major complex it had constructed in Danbury/Ridgefield. Miles Laboratories continues to expand its West Haven plant. Richardson-Vicks has just opened a new research center in Shelton; and Westport-based Stauffer Chemical located its environmental health center in Farmington, partly because of the interchange available between Stauffer and the nearby UCONN medical school.

The industrial robot was born in Danbury, home of Unimation, Inc., the world's leader in robot manufacturing.

Obviously the setting is right for the new arrivals on Connecticut's industrial scene. Digital Equipment Corporation plans a major computer equipment manufacturing plant in Enfield, and has already completed a pilot facility. It is the computer maker's first manufacturing presence in Connecticut. Data General Corporation, also a major computer maker, has purchased the former Annhurst College in the northeastern part of the state (Woodstock) for a training center. Allied Corporation has launched its new information systems unit in Trumbull, right next door to its Bunker Ramo electronics operation.

Venture Capital for Jobs

Connecticut not only helps companies construct new plants and equipment, it also helps them build ideas.

TIE/Communications, Inc. was a small electronics firm operating out of a rented facility in Stamford when it heard that the State of Connecticut had started a new program to help companies develop new ideas and bring them to market.

The manufacturer of specialized telephone equipment received in 1975 the first grant—$195,000—from the Connecticut Product Development Corporation (CPDC), a first-of-its-kind state agency which provides venture capital to businesses.

The investment has more than paid off. TIE has since built—and expanded—a manufacturing plant in Shelton with the aid of state-sponsored industrial revenue bonds. It has entered into several joint ventures with overseas companies and is also constructing a new factory near Shelton in Seymour, which will bring total employment to more than 400 Connecticut workers.

The royalties CPDC has received from TIE and other firms will eventually make CPDC self-sustaining. An important aspect is that if a project doesn't work out, a company doesn't have to pay back its CPDC grant.

"At that time in our corporate development," says Leonard Fassler of TIE/Communications, "we could not have proceeded with a research and development project of such magnitude without the grant from the Product Development Corporation."

CPDC has provided nearly $7 million in grants to more than 50 Connecticut companies.

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In addition, we strongly support business coalitions on health care. Around the country, these coalitions are being formed by the businesspeople who foot the bill for employee benefits. And working side by side with us gives them the influence in the community that will go a long way toward holding down costs.

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"We Won't Forget You"

Once You Have Located in Connecticut

The Department of Economic Development has a wide range of investment incentive programs to help make it easier for a company to move to or expand in Connecticut. And the message to interested businesses is clear: "Once you're here, Connecticut doesn't forget about you."

Industrial Parks—Connecticut was one of the first states in the United States to develop a system of government-subsidized industrial parks. The state now has a $275-million network of some 45 industrial parks owned by municipalities from one corner of Connecticut to another. The parks have competitively-priced land, and are fully served with utilities, roads, and other amenities. "All you have to do is plug in and start building," says Deputy Economic Development Commissioner Peter F. Burns. "In one Waterbury industrial park, a renovated building serves as an industrial condominium, primarily as incubator space for smaller companies not yet ready to buy or build. In certain eligible areas, the department can even tailor-make an industrial park for the exclusive use of your company alone."

Capital Financing—The Connecticut Development Authority is the state's one-stop source for land, buildings, and equipment-financing, and for working capital at lower-than-market rates. The package includes industrial development bonds, mortgage insurance, and direct working capital loans for small manufacturers and small contractors. In all, more than $1 billion in financing has been approved since the creation of the program in the early 1970's. Connecticut's program is one of the very few in the nation that provides access by small and medium-sized manufacturers to the benefits made available through industrial development bonds.

New facilities of Boehringer-Ingelheim Ltd. in Danbury/Ridgefield. Overseas investment has become an important part of Connecticut's economy.

Job Training—Not only does the state provide special tax credits for metalworking apprenticeships and employer-run day-care centers, but it also packages government job-training grants to insure that incoming or expanding industry is equipped with trained personnel.

A Treasure House Of Services—A problem with government bureaucracy? Wary of assembly-line advice? Connecticut can give you individualized help...and does.

In fact, the state can even find you suppliers and buyers. It can be an individual scouting mission by one of the department's field staff, or the unique full-scale treatment afforded by one of the state's contract search centers.

Finding suppliers in Connecticut is a snap. Their existence in large numbers is a major reason many companies move to Connecticut. The state is criss-crossed with a network of business and professional services, and more than 6,000 precision-skilled job shops and other manufacturing subcontractors who cut their teeth on the aerospace, transportation equipment, and other high technology industries. These firms not only can machine any metal part, but they can also produce everything from printed circuit-boards to bolts to plastic injection moldings.

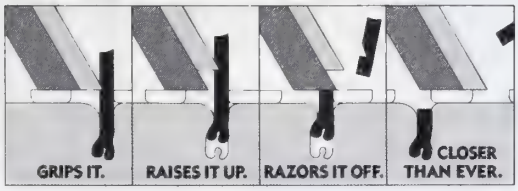
Continued on page 31

The Norelco Rotatract.™ Think of it as the first true twin-blade safety razor.

Twin blades do a good job on tough whiskers. Trouble is, they can also do a job on tender skin. No matter how safe you play it, sooner or later, you'll get a nick or cut.

So Norelco took the twin-blade idea and put it inside its three floating heads. The result: the revolutionary *twin-action* Norelco Rotatract™ Razor. Instead of two blades, the Rotatract™ Razor has 45. These 45 cutters work together with 45 lifters to grip and raise hair up, then razor it off. Closer than ever. Without a nick or cut.

Twin-blade closeness the twin-action way.



So if you want a shave that's very close *and* safe, take a good close look at the twin-blade Norelco Rotatract™ Razor. Available in both cord and rechargeable models. You'll get the closeness of twin blades. Without the close call.

The twin-action Norelco Rotatract™ Razor.

For close shaves, there's no action like twin-action.

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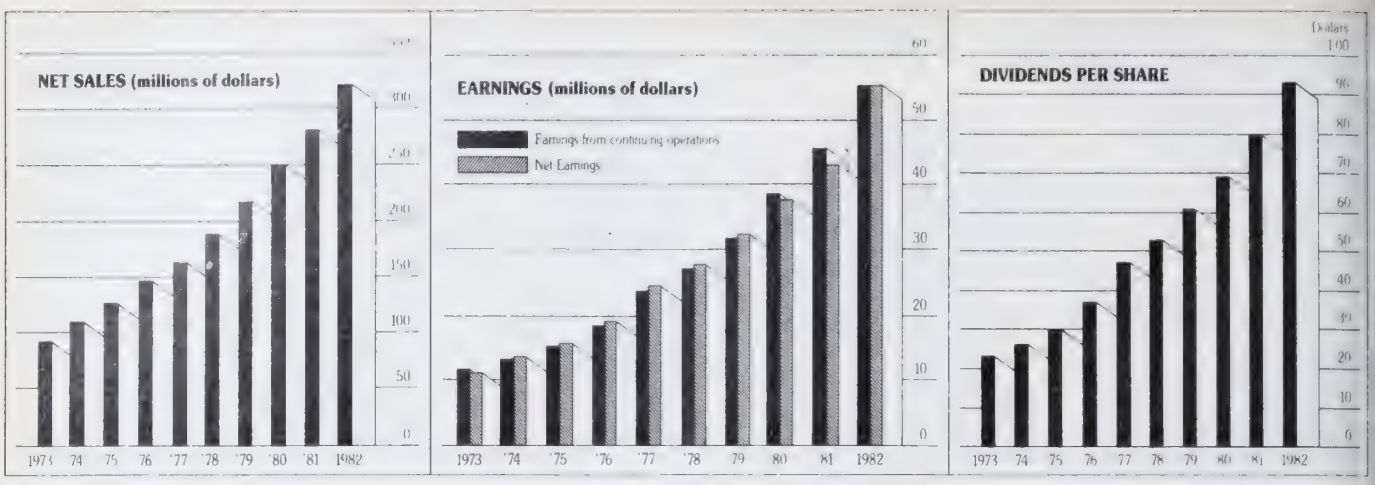

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The Smokeless People.

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Education:

A Natural Resource

Connecticut's chief asset and virtually its only natural resource is its people. Education and training for young people and adults have become vital to the economic health of the state and to the ever-improving "quality of life" for its citizens.

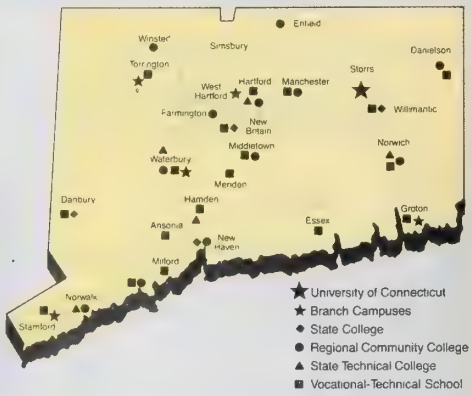
Providing learning opportunities is a tradition in Connecticut that began in 1701 with the founding of Yale College. The state's first publicly supported institution—Central Connecticut State University—traces its history to 1849, and the University of Connecticut to 1881.

Connecticut's higher education system consists of 46 institutions throughout the state covering all academic and technical fields. They include:

- The University of Connecticut and its branch campuses;
- Four other state universities—Central, Western, Eastern, and Southern;
- Twelve regional community colleges;
- Twenty-four private colleges and universities;
- The United States Coast Guard Academy;
- Eighty-four public and private occupational schools.

Together, these institutions enroll more than 155,000 people and grant more than 27,000 degrees each year.

Connecticut Educational/Training Complex



Connecticut has a long tradition of higher education, both public and private.

ADVERTISEMENT 21

Change... and Constancy

Changes of season . . . weather that varies by the hour . . . hillsides that put on rainbows of colors — Connecticut's beauty is characterized by change.

Union Carbide, choosing a new corporate home, found that Connecticut's strengths also include some things that don't change.

We found a welcome from our neighbors in the Danbury area. We found a state that provides a base for industrial innovation and growth.

We found a location that's an hour from two major metropolitan areas, minutes from two interstate highways.

Our people found relatively low taxes, pleasant shopping areas, and a variety of recreational and cultural activities. The state's history, revealed at sites throughout the state, stretches from its Colonial past to its high-technology present. Superb regional theaters, orchestras, and galleries abound.

At Union Carbide's new headquarters, we're finding we like both the things that change and those that don't.

UNION CARBIDE

UNION CARBIDE CORPORATION
Old Ridgebury Road
Danbury, CT 06817

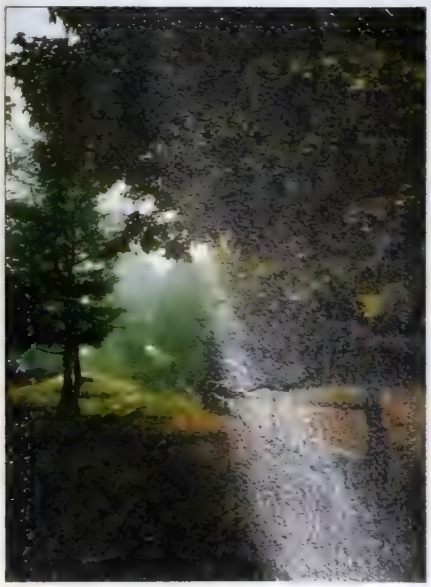
A State of Mind

Quality of Life

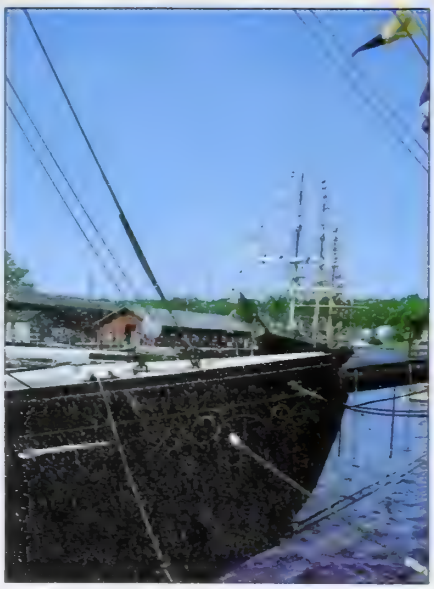
Connecticut, where Mark Twain created Tom Sawyer and Huck Finn...echoes of the whaling ships returning to Mystic Seaport... clicks of the hockey sticks at the Hartford Civic Center...tailgate picnics at the University of Connecticut-Yale game...a Currier and Ives sleigh-ride...

The magic of Connecticut's "quality of life" is an intangible measure of where business likes to do business and plant its people. A comfortable lifestyle may be measured by the quality of schools and medical care. It may be good restaurants or a short commute. What inspires the visitor also reflects Connecticut's qualities of life for its residents. Those who come to visit find themselves surrounded by more than 300 years of living history, some of New England's most marvelous scenery, recreational opportunities from summer

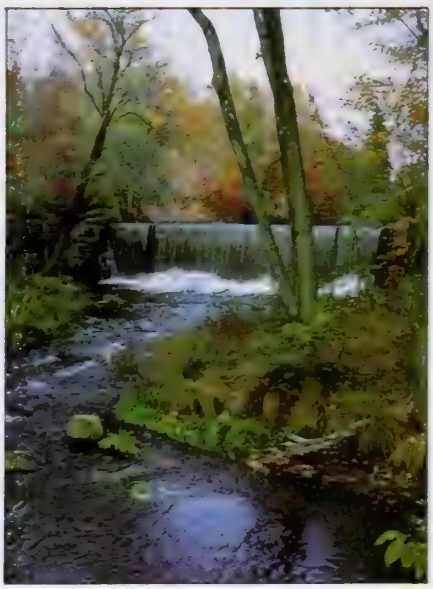
Gillette Castle State Park in Hadlyme typifies Connecticut's abundant recreational facilities.



Autumn in Connecticut. The state's great natural beauty contributes to its quality of life.



Whaling vessels in Mystic Seaport, a part of Connecticut's historic heritage.



Despite its industrial preeminence, two-thirds of Connecticut consists of open or forested land

What's Bangor Punta?

If the name's not familiar, look again.

Bangor Punta is **Piper Aircraft,** the largest producer of twin-engine piston-powered business aircraft and a leader in propjet aviation technology.

Bangor Punta is **Smith & Wesson,** a major manufacturer of firearms and sporting equipment and the leading supplier of law enforcement products to state, local, and federal agencies.

Bangor Punta is **Starcraft,** a leading producer of tent campers and aluminum and fiberglass pleasure boats and the largest converter of vans into luxury recreational vehicles for the GMC division of General Motors.

Bangor Punta is **Jeanneau,** a leading European pleasure boat manufacturer; and **Bangor Punta Marine,** the builder of the popular O'Day and Cal sailboats.

Bangor Punta is **Producers Cotton Oil Company,** the largest cotton processor in the Western U.S.

For a copy of our latest annual report, call the Corporate Affairs Department, (203) 622-8100, or write to Bangor Punta Corporation, One Greenwich Plaza, Room 101, Greenwich, Connecticut, 06830.

BangorPunta

A Connecticut Company Whose Name You Should Know.

How The Hartford he

"Our Claims know-hov loss from turning into a

Claude Glaser, Senior Vice President, Claims Department, explains how The Hartford's fast, expert Claim service can minimize the size of a loss and cut insurance costs.

Q. How can The Hartford's Claims capability help reduce a company's insurance costs?

A. The lower a company's losses, the lower its insurance premiums. That's the bottom line. A The Hartford, we have an impressive track rec for minimizing losses. One example involved explosion at a California oil refinery insured b A corrosive oily substance spewed into the air covered some 2,000 automobiles. If it wasn't moved quickly, all 2,000 cars would have nee repainting at a cost of $500 each—a potential million-dollar loss.

Our Claims people responded quickly and decisively. They had the substance analyzed a

uce insurance costs.

ept a $170,000 million-dollar loss."

orized its immediate removal with a special ing process. The cost? Just $85 per car for a of $170,000—less than one fifth the loss that d have resulted from routine claims handling. minimized the impact of the loss on the er's premiums.

an your responsive Claims service help get ack into business quickly following a loss?

efinitely. And when a real need exists, we can advance a claimant funds before the final t of damages has been determined. That's what id after several greenhouses insured by us in the vest were damaged by a severe windstorm. We n on-the-spot analysis of the damage and made stantial partial payment that enabled the nur- o begin repair work right away. It not only put back in business sooner, but helped prevent er damage to their stock.

Vhy is The Hartford able to respond to a claim quickly and effectively than other insurers?

nlike many insurance companies, we handle t 99% of our claims with our own staff. We have 250 fully automated Claims offices and some) Claims professionals—including experts in a range of specialized loss areas—who are trained notivated to resolve claims quickly and fairly. peed and quality of our claims service get high s from agents, insureds and claimants alike. And s no add-on charge for outside claims service.

low can effective rehabilitation cut ance costs?

can speed up the return of injured employees oductive work. In a recent case, a heavy-equipment operator suffered a severe back injury which prevented him from returning to his job. We arranged for his medical treatment and also coordinated and helped finance his retraining as a meat-cutter. We even advanced him funds to open his own retail butcher shop. He became productive and self-sufficient once again. And our insured was spared the negative impact that some $300,000 in anticipated disability payments would have had on its premiums.

We also accelerate rehabilitation through our countrywide staff of Health Services Representatives—registered nurses who work full-time for the medical, social, psychological and vocational rehabilitation of claimants.

Q. Can I use The Hartford's Claims expertise even if I self insure?

A. Sure. Through our subsidiary, Hartford Specialty, we can provide you with any level of claims service you need, independently of insurance coverages. We're currently providing "unbundled" claims service to some of the country's largest corporations.

Q. How can I put The Hartford's Claims capability to work for my company's benefit?

A. Just contact an independent agent who represents The Hartford.

YOUR Independent Insurance AGENT SERVES YOU FIRST

Don't make a decision on any business insurance without a quote from The Hartford.

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Greenwich
Groton
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Madison
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Middletown
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Moosup
Naugatuck
New Canaan
New Haven
Newington
New London
New Milford
Niantic
North Branford
Northford
Norwalk
Norwich
Norwichtown
Old Greenwich
Old Saybrook
Orange
Plainfield
Plainville
Plantsville
Ridgefield
Rockville
Rocky Hill
Saugatuck
Shelton
Somers
Southington
Southport
Stafford Springs
Stamford
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CBT
CONNECTICUT'S BANK

shorelines to winter ski resorts, and an incredibly diversified statewide cultural atmosphere.

...Connecticut is capsizing on a rubber raft on the Farmington River...speeding down a snowy slope at Mohawk Mountain... sipping autumn cider by a covered bridge...photographing a white-steepled church...strolling the Ocean Beach boardwalk...feeding the lions at Beardsley Zoo...

In Connecticut, quality of life is a state of mind. It is that intangible element that has made Connecticut residents proud of their state...to live here...to work here...where the cities bustle and where two-thirds of the state's land area is open or forested.

It led H. L. Mencken in 1931 to declare that Connecticut was the "most civilized" state in the union. It led Union Carbide two years ago to undertake the largest corporate headquarters relocation in history, moving 3,500 employees to a new home in Danbury because, for one thing, Connecticut was the place "to attract the middle manager talent" needed in the firm's future. The proximity to New York City of some of Connecticut's most attractive suburban areas beckoned first the executives of industry, then industry itself.

It was one reason Ralph Spinnler was able to attract top-flight technical people to work at Spinnler's Teleco Oilfield Services firm in Meriden, a fast-growing company which makes state-of-the-art drilling detection devices. It was a major part of the decisions by oldline Connecticut corporations such as Scovill in Waterbury, Barnes Group in Bristol, Stanley Works in New Britain, and Pitney Bowes in Stamford to make new commitments to their home towns and to construct major new corporate headquarters facilities.

Dozens of the nation's largest corporations...General Reinsurance in Stamford... U.S. Tobacco in Greenwich... Bangor Punta in Greenwich... Chesebrough-Pond's in Greenwich...have moved to Connecticut over the past decade due, in part, to the living amenities available to their professionals. Manufacturers have also found that the quality of life provides them with technicians and production workers who are instilled with the ethic of innovation.

Connecticut is knee-deep in the clam beds...a springtime hike in the Berkshires...oyster boats and oxen pulls...hand-carved chairs and Sunday drives...hot air balloons... Choate and Miss Porter's... Westporter Paul Newman racing at Lime Rock...artists and writers and TV personalities...

Impartial studies repeatedly have cited Connecticut as a "quality of life" state. Authors tout its trend-setting characteristics. Even the State of Minnesota's own lifestyle survey ranked Connecticut first. Of more than 60 high technology and overseas manufacturers surveyed about their move to or expansion in Connecticut, the majority tabbed "quality of life" as the pivotal factor.

Says Barnes Group Chairman Wallace Barnes: "I'd list the quality of life as a prime attraction for Connecticut. The fact that this is a state people enjoy living in makes it easier to attract and retain talented people."

...Connecticut is ice-harvesting on Lake Waramug... reflecting on an old-fashioned train...paddle-boating past the Goodspeed Opera House... skimming by sail across Long Island Sound...sampling peapods, blintzes, and kielbasa along Main Street—all a hop-skip-and-a-jump from "Fifth Avenue."

"In my book, quality makes Smirnoff worth asking for. Its value makes it a best-seller."

ROBERT LUDLUM,
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The Parsifal Mosaic
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n easy to read.

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ıt in my book, quality always does."

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5. Equipment, systems and services for electric utilities, pulp and paper and other process industries, and resource recovery systems.

No other company has C-E's broad range of capabilities to help make the most effective use of the world's energy resources. For more information, including a listing of our offices around the world, write: Combustion Engineering, Inc., Dept. 7004-265, 900 Long Ridge Rd., P.O. Box 9308, Stamford, CT, USA 06904.

COMBUSTION ENGINEERING

Energy Technology. Worldwide.

Once You Have Located in Connecticut

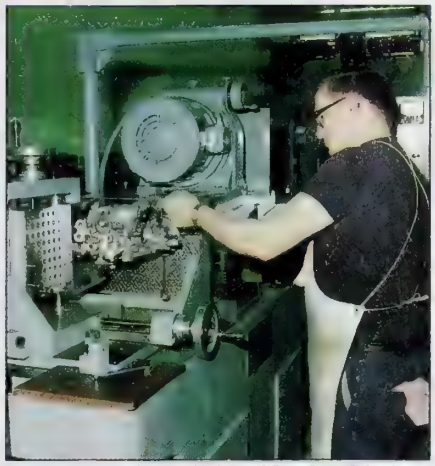
Continued from page 18

Connecticut is so geographically compact (90 miles by 60 miles), and has such an advanced interstate highway and rail system, that any one of these suppliers is never more than one and one-half hours' journey from your loading dock.

Consider Linvar Marwin Ltd., a British manufacturer of storage systems, which launched its United States operation along the international airport connector in Windsor. Linvar wanted to start out by subcontracting the plastic bins and steel racks making up its product. The state's development staff had to look no farther than Linvar's own backyard, and the firm is now pumping hundreds of thousands of dollars' worth of work into area manufacturers.

While finding vendors eases the new start-up in Connecticut, the activity is also appreciated by the local subcontracting base. "Matching local suppliers with newcomers who are unaware of the wealth of talent that exists provides invaluable assistance to small businesses who have limited visibility in the marketplace," says Edwin Rogers, General Manager of Variety Metalcrafts Co. of Rocky Hill.

Connecticut invented the contract search idea with a unique program involving "Sales Contact Centers," which give small and medium-sized manufacturers face-to-face access to the purchasing managers of large out-of-state corporations.



Connecticut's traditional leadership in metalworking and machine tools has generated a network of subcontractors who can make virtually any product for any industry.

The department hosts an IBM, a Volkswagen, or a Joy Manufacturing at a central Connecticut location, inviting hundreds of local subcontractors who have the capabilities of supplying these major companies. Since the mid-1970's, an estimated $500 million in initial new contracts (and hundreds of millions of dollars more in follow-up work) have been generated for Connecticut firms.

Connecticut's Bradley International Airport in Windsor Locks, a major transportation hub, will be enhanced by a more than $100-million modernization project now under way.

Embroiled in government bureaucracy? Connecticut has a "Business Ombudsman" whose job it is to get you a response within 72 hours, whether for a broken traffic light in front of your industrial park or a problem with customs on a sale you have made to the People's Republic of China.

Energy costs outrageous? Connecticut has a team of "Energy Engineers" who do on-site audits of industrial plants, saving companies millions of dollars in energy costs, often with only minor adjustments.

Got an inventory imbalance? Production line lagging? Connecticut's "Development Technologists" can analyze your predicament and give you consultant-type solutions simply as a service to you.

Struggling with the limitations of being a small business? Connecticut has a special "Office of Small Business Affairs," one of only a handful in the nation, which can advise on personnel, marketing, even bank and other private and public financing sources.

Want to carve a niche for your product overseas? Connecticut's "Export Promotion Office" has files full of overseas firms who are interested in joint venture and licensing agreements. As a state that is among the most active exporters in the U.S., Connecticut knows the overseas markets and can provide an important entree to them.

Need a new building? Planning to invest in some land so you can construct a new factory? Connecticut has a dozen "Industrial Agents" who—at no charge—search for sites and buildings to suit your needs. The department has a computerized listing of virtually every available site and building in the state. Agents provide personalized site and building tours and will act as liaison with other program areas in the state.

The New Connecticut National Bank

A subsidiary of Hartford National Corporation

We are a significant new financial institution serving Connecticut and beyond. Forged from the merging of Hartford National Bank and Connecticut National Bank. Providing business customers with state of the art corporate and trust services, creatively customized to their requirements. Fulfilling their need for a powerful, yet responsive banking partner. Building productive banking relationships on a foundation of financial strength and broad expertise.

Member FDIC

Impetus to Office Boom

Insurance Capital

Connecticut gave the world the first automobile and aviation insurance policies; it also gave the universe the first life insurance policy on an astronaut.

The insurance industry has historically been an integral part of Connecticut's economic environment. The industry not only provides thousands of jobs for state residents, but it is also a major supporter of civic projects ranging from home improvement and neighborhood renewal to health-care promotion, social and community-based organizations, and downtown revitalization.

The industry has also provided much of the impetus behind the office construction boom that has occurred in Connecticut, from the office towers which are changing the face of Hartford's skyline, to the corporate headquarters buildings in Stamford, and the futuristic module complexes dotting the countryside in-between.

Sailboats glide by the ever-changing skyline of Hartford, the state's Capital. Travelers Insurance's landmark tower rises in the background.

Connecticut is home to 19 corporate insurance entities, involving 45 operating companies ranging from the "Big Four" in the Hartford area—Aetna Life & Casualty, Travelers Corporation, Connecticut General (CIGNA), and The Hartford Group—to tiny Litchfield Mutual with four employees.

Hartford, long known as "The Insurance City," has gone through an unprecedented office construction period. An office survey of 17 major markets showed that metropolitan Hartford's office construction was growing at a faster rate than that of Denver, Dallas, Los Angeles, Miami, New York, or Chicago.

Aetna has expanded in Hartford and is participating in the construction of the 38-story CityPlace in the city. The tower will be the tallest building in Connecticut. Aetna is also constructing a new complex in Middletown. Hartford Insurance and Covenant Life are expanding into Simsbury. Phoenix is building in Enfield. Travelers is expanding throughout Hartford and plans to occupy two new office towers, now under construction. CIGNA has greatly expanded its Bloomfield operations, and General Reinsurance will be moving from Greenwich into a new office building in Stamford.

This supplement was prepared under the direction of David C. Driver, Director of Marketing Services, Connecticut Department of Economic Development.

Photos by Dominick Ruggiero.

Editor: T. J. O'Connor, Westport Writers Workshop.

For further information regarding the State of Connecticut, contact: John J. Carson, Commissioner, Connecticut Department of Economic Development, 210 Washington Street, Hartford, CT 06106. Telephone: (203) 566-3787

Leading Corporations Headquartered in Connecticut

	Location		Location
Aetna Life & Casualty	Hartford	Insilco	Meriden
Amax	Greenwich	Lone Star Industries	Greenwich
American Can	Greenwich	Moore McCormack Resources	Stamford
Armstrong Rubber	New Haven	Northeast Utilities	Berlin
Avco	Greenwich	Olin	Stamford
Bangor Punta	Greenwich	Peabody International	Stamford
Barnes Group	Bristol	Perkin-Elmer	Norwalk
Champion International	Stamford	Pitney Bowes	Stamford
Chesebrough-Pond's	Greenwich	Pittston	Greenwich
Combustion Engineering	Stamford	Richardson-Vicks	Wilton
Connecticut Bank & Trust	Hartford	Scovill	Waterbury
Connecticut General	Bloomfield	Singer	Stamford
Connecticut National Bank	Hartford	Southern New England Telephone	New Haven
Continental Group	Stamford	Stanadyne	Windsor
Dexter	Windsor Locks	Stanley Works	New Britain
Emhart	Farmington	Stauffer Chemical	Westport
General Electric	Fairfield	Travelers	Hartford
General Host	Stamford	Union Carbide	Danbury
General Reinsurance	Greenwich	Uniroyal	Middlebury
General Signal	Stamford	United Technologies	Hartford
General Telephone & Electronics	Stamford	U.S. Industries	Stamford
Great Northern Nekoosa	Stamford	Warnaco	Bridgeport
Heublein	Farmington	Xerox	Stamford

Our Commitment To Connecticut

Andrew Sigler
Chairman and CEO
Champion International

Stillman B. Brown
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United Technologies

H. Barclay Morley
Chairman and CEO
Stauffer Chemical

Alfred W. Van Sinderen
Chairman and CEO
Southern New England Telephone

Francis M. White
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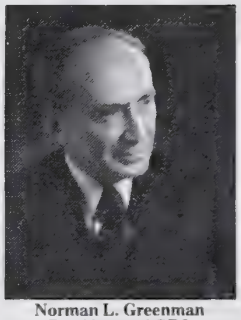


Norman L. Greenman
President and CEO
Rogers Corporation

DeRoy Thomas
Chairman and President
The Hartford Group

William B. Ellis
Chairman and CEO
Northeast Utilities

"Here in Connecticut, we have a strong working partnership between state government and private enterprise. We believe that success in this area demands total commitment by both.

"That's why those of us, as board members of the Connecticut Economic Development Corporation (C. E. D. C.), are spearheading the drive to support the work of our State Department of Economic Development with our time, our energy and our dollars.

"All of us feel that Connecticut is a very special place. Our aim is to do everything we can to make it an even better place to live and work."

– William B. Ellis
President, C. E. D. C.

If you think it's impossible to compete in Japan, take a look at British-owned Micro Focus, whose Japanese language software is the hit of Tokyo offices.

Selling ice to the Eskimos

By Martin Love

GIVEN JAPAN INC.'S outstanding success in marketing to the rest of the world, you would expect it to have its home market figured to a tee. Certainly, in the area of high technology, you would never expect a Japanese company to miss a beat. And yet, there is Micro Focus, Inc., the Palo Alto, Calif. subsidiary of a small British computer firm, busily selling software that allows the Japanese to enter data into a microcomputer without the necessity of an English-language interface. No Japanese company has such a product. As Paul O'Grady, the president of Micro Focus, puts it, "We are selling ice to the Eskimos."

If not ice, certainly the makings of cool millions. The company already takes in 15% of its $7 million in sales from Japan, even though its product, a Cobol compiler for microcomputers, was introduced only last fall. And its sales could easily double this year. According to Stan DeVaughn, a spokesman for Apple Computer, some 640,000 micros were sold in Japan last year, but sales are growing so rapidly that unit sales could reach 1.5 million micros by the end of 1984. Most of those machines are good bets for Micro Focus' compiler because most Japanese micros, like their American counterparts, are ending up in the office, and Cobol is the premier computer business language in the world.

In order to appreciate Micro Focus' product, you have to understand the burdens under which Japanese computer users labor. First, there is the language itself. Made up of more than 50,000 distinct ideograms, Japanese does not lend itself to simple keyboard inputs, as alphabet-based languages do. Even when that number is reduced to the 6,000 Kanji characters that are used in at least 85% of all business applications, the average Japanese office worker faces an almost insurmountable task in using the computer. That task is further complicated by the requirement that the user first learn a foreign language—English—to program the computer for specific tasks.

The Micro Focus program does not eliminate the Japanese end of the problem, but it does make knowledge of English unnecessary. That means the programming capability is automatically opened to a greater number of people, thereby making programming productive. As Paul Adams, Micro Focus' vice president of sales, explains it: "A compiler takes statements or commands and converts them into something a computer can understand and execute. Ours supports Kanji, which means that you can enter commands in Kanji and get Kanji out on the screen. That just speeds up computer use enormously."

Micro Focus Cobol in Kanji characters
Easing the language barrier.

Micro Focus is not the only ice salesman in Eskimoland. IBM, for instance, introduced its Kanji Information System in Japan in 1979 to allow programmers to enter and computers to display data in Kanji characters. IBM says there is a huge demand for a Kanji interface. Its system includes a keyboard one-third larger than an English-language keyboard, but it is not "portable." That means it is not applicable to personal computers, the fastest-growing segment of the computer market. Not having to compete with IBM, of course, leaves O'Grady all smiles.

There is a double irony to Micro Focus' success. The first is that of a Western company's developing a tool that increases Japan's already enormous productivity. But there is another. Without Western firms' helping them along, and barring a breakthrough of their own, the next generation of Japanese computers would surely be speaking English.

Inscrutable, those Occidentals.

Technology

Edited by Stephen Kindel

Shake well, stir gently

BIOTECHNOLOGY, for all of the breakthrough-a-week headlines it generates, is still not very far along toward becoming a major industry. The machinery that makes it possible to transform intricate laboratory experiments into low-cost, widely available products—the "infrastructural component"—is not yet in place. It is as if biotechnology were still waiting for its Henry Bessemer to come along. Or, more likely, its Andrew Carnegie.

Then again, they may already be here, in the persons of David and Sigmund Freedman. They are president and secretary-treasurer, respectively, of New Brunswick Scientific, a New Jersey company that has a strong hold on industrial fermentation technology. While its sales are still small—$20 million in 1982—the entire biotechnology industry depends heavily on instruments like those made by New Brunswick Scientific. That's because everything from yeast to yogurt starter to antibiotics to enzymes requires fermentation technology. In order to produce monoclonal antibodies, interferon and a host of other genetical-

Technology

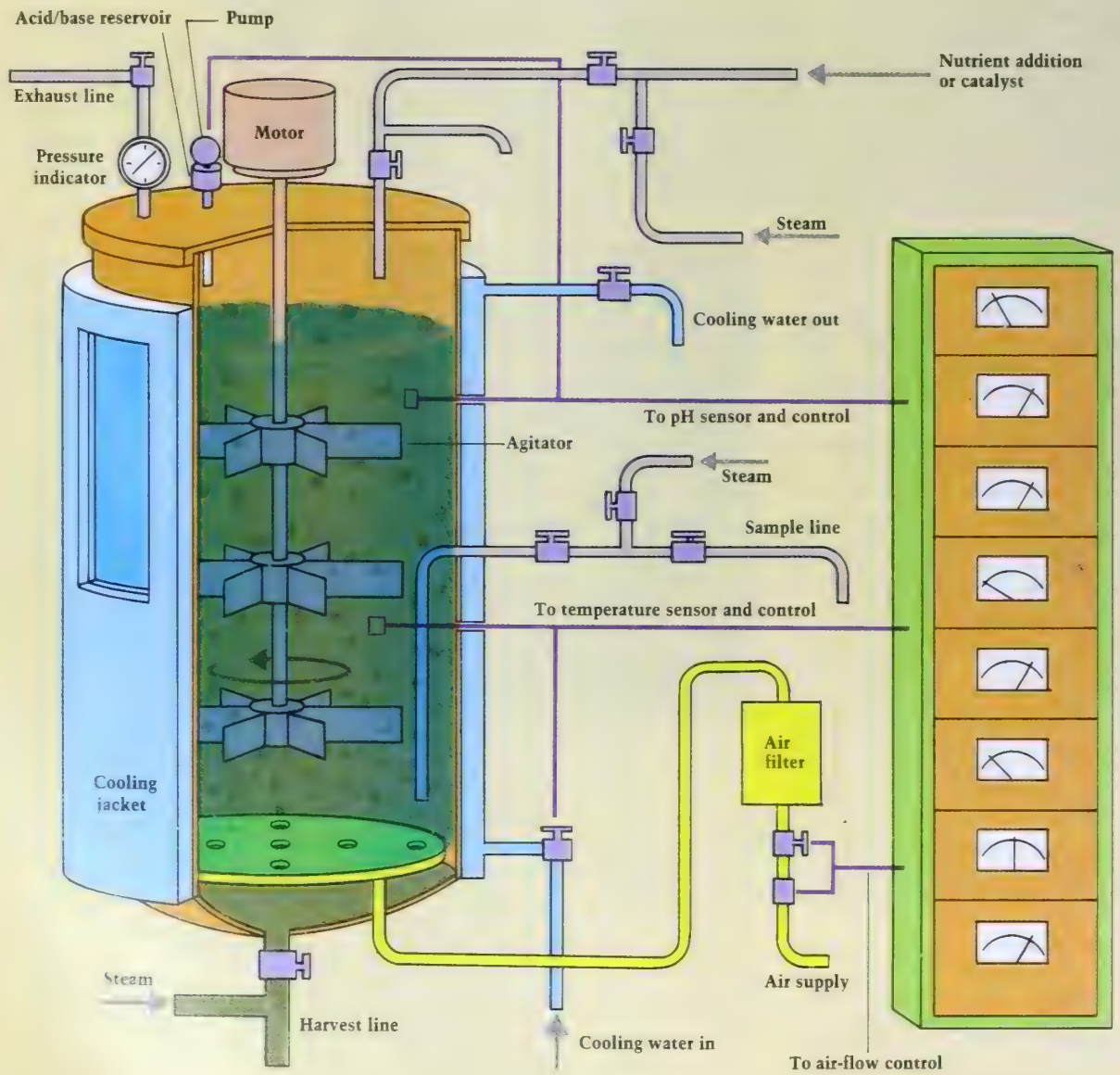
ly modified products, you need the kind of equipment that New Brunswick Scientific manufactures. Other than proprietary technologies owned by the pharmaceutical industry and Corning Glass Works, New Brunswick Scientific is just about the only game in town.

NBS got into the business almost as an afterthought. The brothers Freedman originally started a business after World War II that capitalized on David's trade as a toolmaker. Their company, New Brunswick Tool & Die, manufactured tools for making knitting machine parts. But the brothers rapidly developed a sideline business in repairing and making parts of biological research machinery that graduate students from nearby Rutgers University would bring to them. The early Fifties were heady days for microbiology at Rutgers. Selman Waksman had won a Nobel Prize in 1952 for his discovery of streptomycin there, and the labs were going all out.

By 1953, with the Freedmans now manufacturing lab-scale fermenters, the company began to shed its blue-collar work—and name—for the loftier New Brunswick Scientific. Though the company was short on scientific expertise, its good relations with the university scientific community proved invaluable. Students and professors continued to offer problems and suggestions. "Compared with what we have today, the early fermentation equipment was

Everything into the soup

In order to get useful products out of a fermenter, you have to start with the right ingredients—the microbe or bacterium you are growing, nutrients, precise temperature and pH and oxygen or its total absence as needed. Stir well, keep the mixture completely contaminant free, and the result is a valuable harvest.



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3M

crude," says David Freedman, "but it was still better than what was in use." Because of the increasingly complex nature of fermenters, some of this university cooperation continues.

The heart of the fermenter is a large vat, usually of stainless steel, which is filled with water, nutrients and a bacterial culture to make a sort of microbial broth. Left alone, the organisms in the soup would rapidly divide, producing an ample supply of whatever is being grown. But controlling growth isn't that simple. Nutrients vary according to what is growing.

At different stages the mixture demands different ingredients or different proportions. A specific temperature and pH level must be maintained, both within fairly narrow limits. Then again, both may fluctuate during the growth cycle. With anaerobic organisms, oxygen must be kept out of the fermenter. Where it is needed, the oxygen must be filtered and sterilized so that it does not introduce contaminants into the mixture.

A fermenter has to maintain an aseptic environment for several reasons. Contamination could, of course, interfere with or even destroy a product. Or, a contaminant could make an end product very expensive to purify, which would be just as catastrophic to commercial producers. Sterile conditions are particularly tough to maintain at points in the fermentation system where materials are introduced or drawn off. New Brunswick Scientific solves that problem by sterilizing inlet and outlet valves with steam.

To all these requirements is added the complication of motion. It's essential that a microbial mixture be thoroughly stirred, to allow the microorganisms access to the nutrients supplied. This means that paddles and stirrers must be built into the tanks, but in such a way as to prevent contamination at the point where the paddle enters the fermenter. In the end, fermenter design is "not just a matter of keeping the bacteria happy," says David Freedman. Richard Thoma, New Brunswick Scientific's director of process development, says: "They still don't necessarily do what you want them to do. The real key is to know what's going on inside the fermenter."

NBS' bestseller remains its benchtop fermenters, which go for about $3,000. But it's the pilot plant custom fermenters that are not only more profitable for the firm but incorporate advanced designs. These are used both for research and to help companies figure out if they can produce a fermentation product in commercial quantities. Customers for this type of equipment include major firms such as Eli Lilly and Green Cross, both of which have moved to volume production of biotechnology products.

NBS has recently introduced a microprocessor-based instrumentation for its fermenters that Tucker Anthony analyst John Taylor says is more advanced than anything on the market. It can measure any of the variables—temperature, pH or the level of dissolved oxygen in the mixture, for instance—add chemicals or air or heat up the mixture, if necessary. Conditions within the tank can be altered, either by using timed controls or controls triggered by something that happens in the fermenter. Previously, most changes had to be made manually. NBS has also patented a complete computer system to coordinate the processes.

The company is looking forward to selling its fermentation equipment to chemical and food products companies. "Until now, pharmaceutical companies virtually have had a monopoly on how to do sophisticated fermentation," says David Freedman, "but Du Pont and Monsanto are setting up sophisticated systems as they get further into genetic engineering." Both companies are likely to be NBS customers.

Genetics, Thoma points out, has its own hidden surprises. In recombinant work, for example, production capabilities really haven't been determined yet. "Maybe the products won't grow as well with genetic changes as before," says Thoma. "The exploration of these areas is just starting." Luckily for the Freedmans, who own 27% of the company, New Brunswick Scientific has a 30-year head start over any other U.S. manufacturer. So the exploration is bound to pay off.—**Janet Bamford**

Mixed media

It isn't so hard to understand change in the computer industry. First comes hardware. Increase its power, and you set up the demand for new software. A 16-bit or 32-bit microprocessor or a 64K RAM begets the Unixes and VisiOns and Lisas. And these in turn create a need for more powerful peripherals. Single chip interfaces, so that computers can talk to each other more efficiently. Local area networks, so that computers can access each other's files across a continent. And memory storage devices of ever greater capacity, so that all the information generated by all the new programs can be efficiently used by the people who have paid all that money for new hardware. What could be simpler?

But life, as the poet Allen Ginsberg points out, is a reality sandwich. And for the peripherals industry, much of the meat is still missing. Single chip interfaces are a few years away. Local area networks are a tangle of unresolved design layouts awaiting a common standard.

Only in memory devices has there been the progress to match the new microprocessors and advanced software just hitting the marketplace. But here, at least, what progress! According to Melissa Yonge, an analyst at Venture Development Corp., a Wellesley, Mass. research group, sales of magnetic memory media are growing at an overall 30% compound annual rate and could easily rise from last year's $1.4 billion to $5.2 billion in sales by 1987. Those numbers are likely to be on the conservative side, because they represent projections based on the current technology, which is dominated by the 5¼-inch floppy disk and the 5¼-inch and 8-inch hard disk, or Winchester drive.

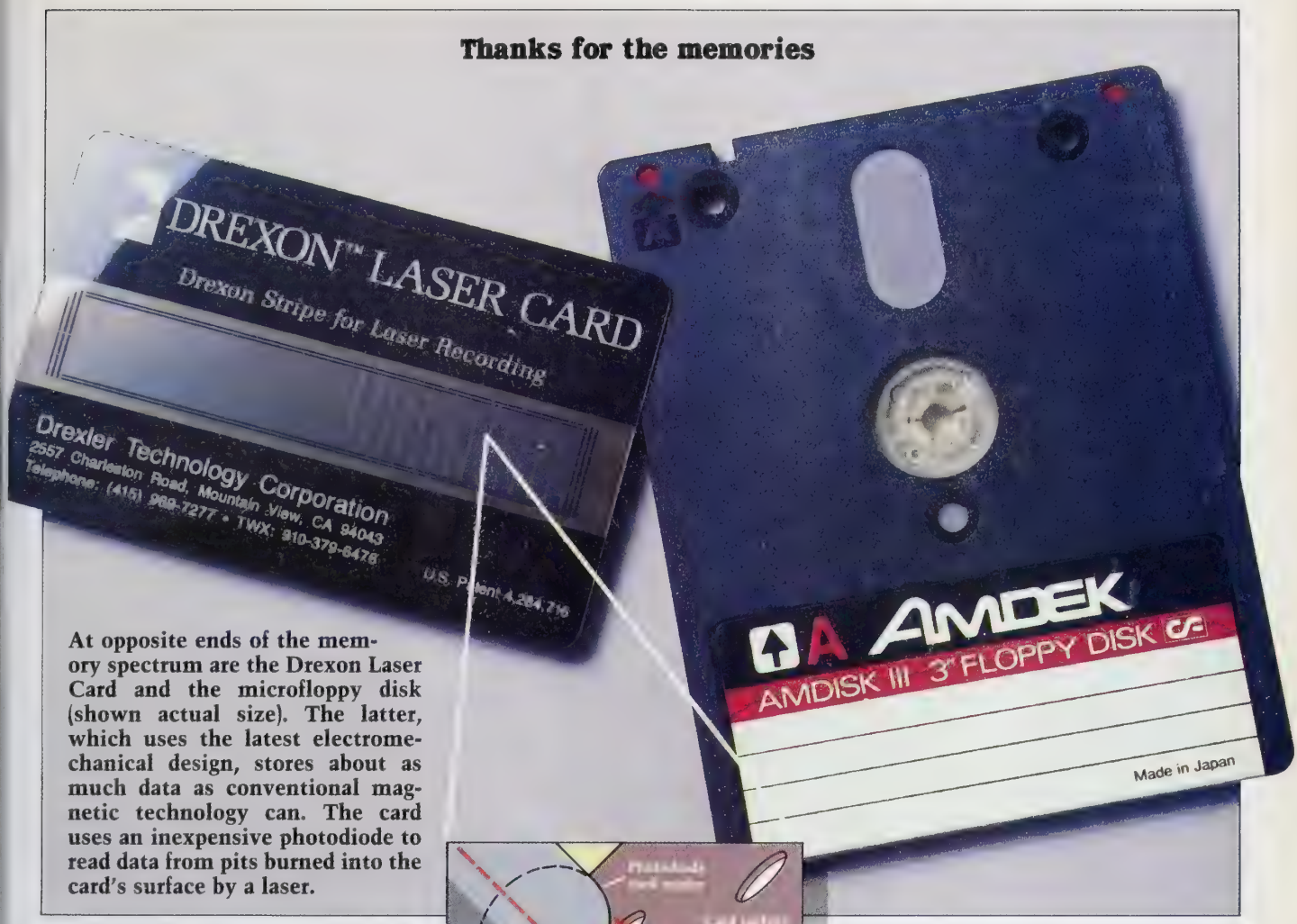
By the time 1987 rolls around, all three products are likely to be obsolete and long since replaced by a triad of more advanced devices: microfloppy disks—and their drives—just now being incorporated into products; vertical recording technology, which packs up to ten times as much information onto a magnetic tape or floppy disk as can now be stored; and optical storage devices, which hold so much information as to render all magnetic media forever useless.

We owe such an abundance of storage power to some fear and some greed and even a bit of common sense.

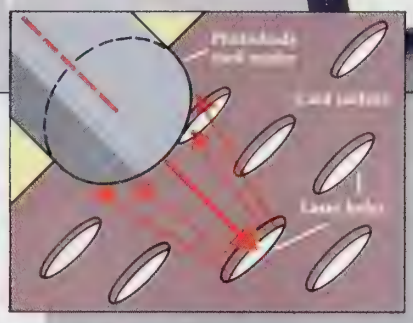
Fear's child is the microfloppy disk and drive. Japan's computer industry fears being shut out of the American memory market, and with good reason. Both floppy disks and Winchesters are dominated by a handful of U.S. firms; Xerox' Shugart Associates, Shugart spinoff Seagate Technology, Tandon, Control Data and IBM own the lion's share of the disk business, and American magnetic media companies such as 3M and Memorex get most of the business of providing these manufacturers with the media and coatings that are the heart of floppy and Winchester disk technology.

Japanese companies, unwilling to

Thanks for the memories



At opposite ends of the memory spectrum are the Drexon Laser Card and the microfloppy disk (shown actual size). The latter, which uses the latest electromechanical design, stores about as much data as conventional magnetic technology can. The card uses an inexpensive photodiode to read data from pits burned into the card's surface by a laser.



take a backseat, have been developing their own drives, passing on the coating work to their own magnetic media firms, among them Maxell and TDK. The payoff: Just as the Japanese have managed to produce superior sound recording tape through the use of ever tinier magnetic particles, so, too, have they managed to improve their computer storage devices. Since each iron or chrome oxide particle on a tape or disk represents one piece, or bit, of computer data, the greater the number of particles in a given area, the greater the memory density and the larger the amount of information that can be pulled out of the computer's memory for use by the microprocessor at any one time.

This increase in memory density also means that you can make a disk and its accompanying drive smaller and sacrifice nothing in the amount of memory available. The Japanese have done just that. Their new microfloppy disk drives are all in the 3-inch area, yet offer the possibility of challenging the capacity of conventional 5¼-inch American floppies, with about a megabyte of information (a byte is 8 bits, a megabyte 8 million bits) per disk.

The problem with defensive marketing is that you bring products to the consumer before they are ready. Japanese companies traditionally fight it out on their home turf for market and product superiority, with the winner getting coveted export assistance from the Ministry of International Trade & Industry. But Japan's microfloppy makers were so afraid of other advances in the U.S. memory market that they have brought their internal squabbles to American shores, so that instead of a single product, American computer owners and manufacturers have to choose between two different Japanese microfloppy drives.

Probably leading the pack is Sony's 3.5-inch drive. It is already being marketed in the U.S. by Sony and has been incorporated by Hewlett-Packard into one of its products. More important, Sony designed its drive expressly for the business computer market and has been beating the bushes to line up American business computer support. To date, about 20 companies have joined Sony's push.

Not to be outdone, however, is a group of Japanese companies, led by Hitachi, which is pushing its own 3-inch disk. Hitachi's minions are mostly Japanese companies that do not now actively market computer products in the U.S., but are looking for a means of market entry. These include Canon, Fuji Photo Film and Sanyo Electric, all of which have seen their traditional consumer electronics and camera businesses wilt in the face of market saturation. Interestingly, the Hitachi group has also attracted support from both 3M and Memorex, which want access to Japan's advanced coating technology.

According to Jeff Maziarek of Amdek, an American company that markets the 3-inch disk, the reason for the size problem is found in the peculiar nature of the Japanese home market. "In Japan, hobbyists share software by mailing it to each other," Maziarek says. "The standard Japanese envelope will accommodate a 3-inch disk, but not a 3½-incher. That necessi-

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Technology

tates two separate designs."

While the Japanese push and shove for market share in the microfloppy market and look nervously over their shoulders at the American entrant—a 3.9-inch disk from IBM—another technology is elbowing its way through the crowd. Vertical recording—so-called because it stands the magnetic particles up on their poles instead of stringing them along end-to-end, freight-car style, like conventional magnetic tape—is also a Japanese-originated technology. But its leading exponent is an American company, Minneapolis-based Vertimag Systems Corp.

Despite its ability to squeeze mammoth amounts of information into a very small space, vertical recording was not taken very seriously after it was postulated in 1975 by Shunichi Iwasaki, a magnetics professor at Tohoku University. No one appeared to need the capacity it offered, and it remained untried. And the economics were not promising, mainly because conventional media's iron oxide coatings were cheaper than the cobalt chrome needed for vertical recording. Moreover, the process used to coat the polyethylene terephthalate of floppy disks or the polished aluminum of hard disks has proved to be excruciatingly difficult to shift from the laboratory to the production line.

The company that has come closest to solving all of these problems is Vertimag. Ironically, the idea of forming the company came from Iwasaki himself during a three-month visit to the University of Minnesota's Magnetics Research Laboratory in 1977. Iwasaki convinced Jack Judy, the lab's director, and Clark Johnson, a former magnetics researcher with 3M, of the density advantage of vertical media. In 1980 Judy and Johnson got Vertimag off the ground with a $1.8 million investment from Sweden's telecommunications giant, L.M. Ericsson, and others.

Since then, Vertimag has raced to assemble an entire system for floppy disks, from developing a special head for reading vertical media to altering the electronics in conventional disk drives for the huge chunks of data a vertical floppy can spin off. Recently it began selling a few prototypes of a 5-megabyte, 5¼-inch floppy, with full production scheduled for next year. "We have the leading-edge technology," says Johnson, now Vertimag's president. "We can do it in the laboratory. We understand the technology. Now we have to scale it up. But doing it in the lab isn't the same as producing millions and millions of disks a year." Vertimag is currently designing a 35-ton, 50-foot-long machine that will use a sputtering process to coat 2-kilometer-long rolls of media and produce some 3.5 million 5¼-inch floppies a year. That may be conservative. Laurence Lueck, publisher of *Magnetic Media Information Services*, estimates that conventional floppy disk sales will go from 400 million units this year to 700 million units in 1984.

That leaves a lot of room for, well, vertical growth, and the Japanese, notably Hitachi, Toshiba, Sony, Fujitsu and Nippon Electric, all have extensive, well-funded R&D programs—several headed up by Judy's former students. And then—again—there is IBM, which has done considerable work on vertical recording for hard disks and is reportedly ready to launch a major effort in floppies.

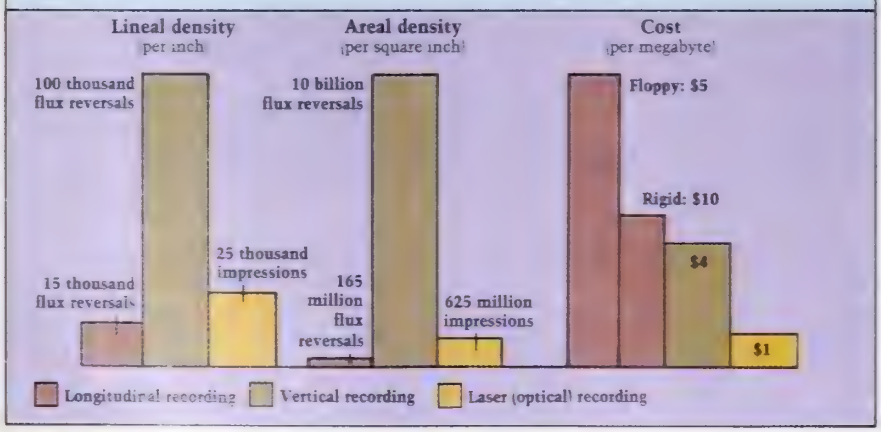
In the end, all the work on magnetic media might come to nothing. While vertical magnetic storage provides at least a tenfold increase in information capacity, optical recording—information burned into a medium by a laser and recovered by a photodiode—offers a 100-fold increase in storage. Laser disks, already available as a consumer alternative to videotape, store information in gigabyte quantities. (A gigabyte is 1,000 megabytes. Compare that with the five megabytes offered by Vertimag's 5¼-inch floppy disk and you begin to understand the potential of optical recordings.) Further, while magnetic media require extremely complicated electromagnetic and electromechanical devices to lay down and retrieve information, thereby placing an expensive floor on the price of tape and disk drives, optical recording's laser and photodiodes can be all electronic and produced for a few dollars.

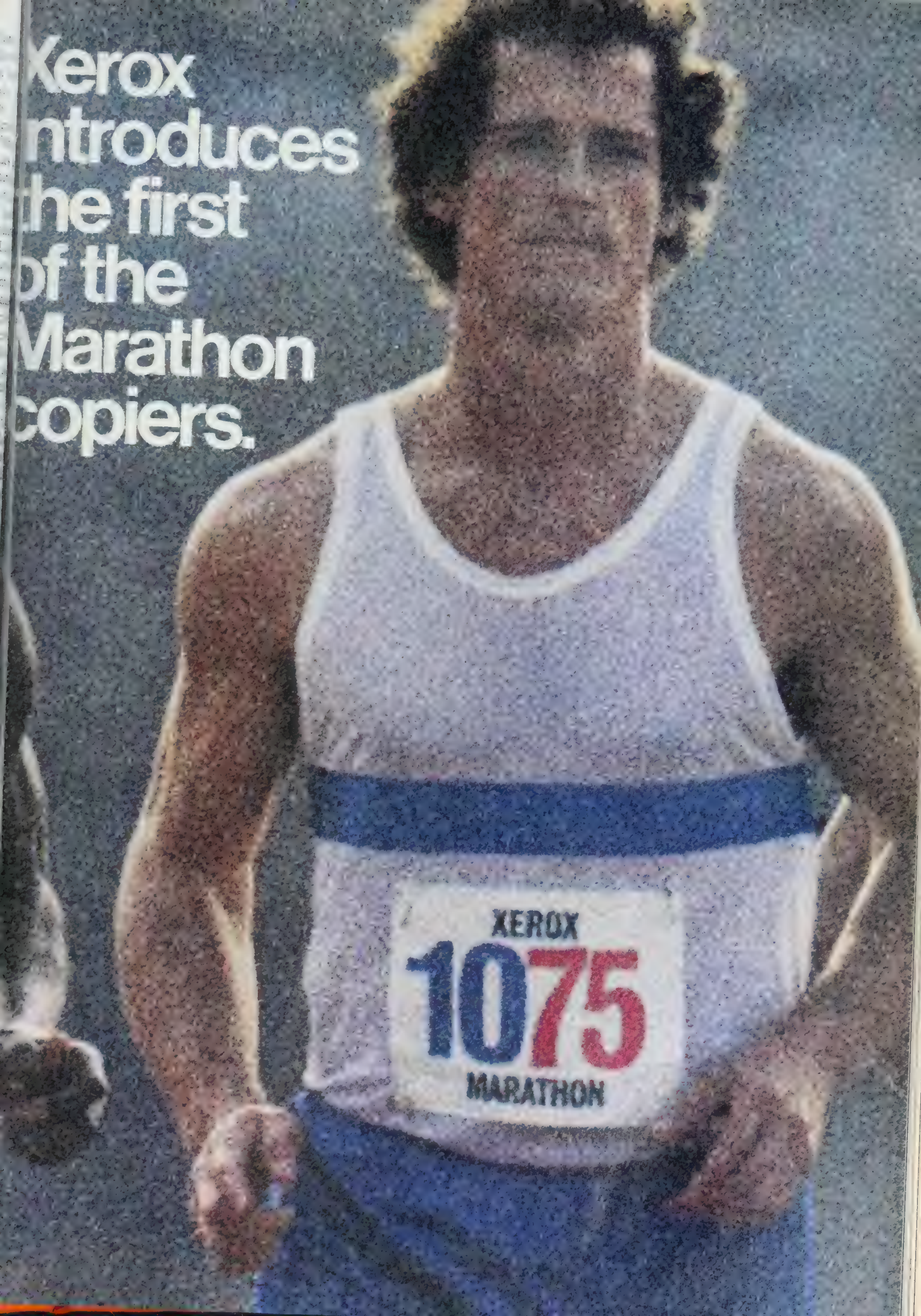
Just how cheap optical recording promises to be is illustrated by the first product becoming available in the commercial marketplace, the Drexon Laser Card. A product of Drexler Technology Corp. of Mountain View, Calif., the Laser Card is the size of a conventional credit card. Its surface is covered with a coating that lends itself to producing extremely uniform holes when burned by a laser. This surface, fully covered, holds two megabytes of memory, and the device that will read it costs less than $100, compared with about $20 for conventional floppy disks that would hold the same amount of information, and over $700 for the drives. The Laser Card is a natural for storing bank records and as a bank debit card, and for rapid loading of software into personal computers. Drexler has already sold distribution licenses for the Laser Card to Japan's Toshiba and Fujitsu, and L.M. Ericsson, all of which are expected to incorporate laser technology in future computer offerings, and it has built a facility to turn out the cards in gigaquantities.

So much change makes the trend clear: The cost of all hardware, including memory, continues to drop so rapidly that it will almost certainly become a cheap commodity item, given away when the customer buys the much more expensive software. That's when the real marketing fun will begin.—**S.K. and Robert Teitelman**

Free fall in memory prices

Each new development in computer memory has sharply cut the price per megabyte—8 million bits of computer data—while memory densities have increased dramatically.

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ı don't need. For that matter, when ır copier needs change, so can your 5. That's how adaptable it is.

3ut what makes the Xerox 1075 copier a rathon is how it's been designed to run. Every major component in the new ox 1075 has had to pass an unprece- ıted array of stress tests.

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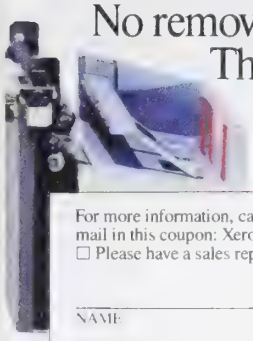

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A return to Brand X

By Richard Greene

IN EARLY June a U.S. District Court in Arizona will deliver a decision of great importance to the Pepsi generation, followers of Ronald McDonald and comparative advertisers everywhere.

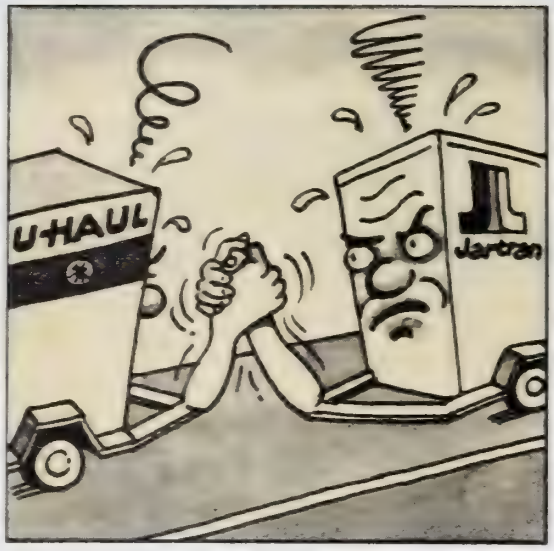
Judge Earl Carroll, who is hearing the case, will decide whether U-Haul, the giant moving and storage company, should get up to $375 million from its competitor, Jartran, and its former chairman, James A. Ryder. U-Haul is suing over a series of ads comparing the two companies' services in newspapers between late 1979 and January 1981. In its pitch, Jartran claimed to provide cheaper and better-moving vehicles. U-Haul says neither statement was true and Jartran hadn't done adequate research to prove its claims.

Jartran is now in bankruptcy proceedings, so U-Haul will probably never see anywhere near $375 million. But that's not really important. The outcome could have a major effect on comparative advertising.

U-Haul contends that Jartran's advertising agencies are also at fault. "Through SEC law, public relations firms can be liable for statements they release," says Paul Kelley, assistant to the president of U-Haul. "We are saying that an advertising agency is similarly responsible to check the figures released by its client

U-Haul also charges Jartran was responsible for the truth of comparative claims like "safer" or "better." Such claims are typically made assuming people don't take them to be precise reflections of exhaustive tests. But U-Haul says that's unfair.

This is the first argument of its kind between national advertisers to be decided in court. Other disputes, such as McDonald's recent lawsuit against Burger King, have been settled. So if U-Haul wins here, other advertisers and their agencies will pay attention. "We realize that this case may have a chilling effect on comparative advertising," says Kelley.



U-Haul, of course, isn't out to chill anything. It just wants to beat Jartran.

A dubious route to fame

Should Control Data get out of South Africa? Should Dow Chemical quit dealing in deadly chemicals? Should Commonwealth Edison shut down its nuclear reactors? Questions like these show up on almost every proxy statement these days. Clearly it is easy for special interest pleaders to get their dubious propositions on the corporate ballot. They generally lose, of course, but who cares. Publicity is their game.

Here's how it works: An individual who owns only one share can propose resolutions simply by complying with SEC guidelines, and a corporation cannot deny him a hearing without SEC review. That's why lots of pressure groups routinely put their pet questions to shareholders.

This costs corporations time and money, and the SEC concedes there is a danger that shareholders may be put off reading proxy statements full of doomed resolutions. So several reforms are under consideration, the most popular of which requires that a resolution's backer own at least $1,000 worth of stock.

Big business, you might think, would be all for this kind of suggestion. But think again. Many corporate officials are clearly worried about negative publicity. You can almost see the headlines: "Corporate brass denies nuns a hearing." Rather than face that, many executives would rather submit to all the cost and bother of printing the doomed resolutions.

Enter SEC Commissioner Barbara Thomas, a former Wall Street lawyer, with a proposal that she frankly admits is somewhat cynical. Her idea: Simply require that the name of the person who introduced the proposal be left off the proxy and kept confidential. "I believe that as long as it's so easy to set the proxy machinery in motion, there will be people who think that this is a good way to see their names in print," she says. "Some individuals use the process to focus the attention of billion-dollar businesses and millions of public investors on them personally. These people are misusing the proxy."

It's an attractive proposition. As Thomas points out, "It would cost the country nothing. In fact, it would take nothing away from people who really believe in their ideas. Nobody can complain that his rights have been abridged. —R.G.

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Buick announces a little more wagon.

The stylish wagon you see sitting very smartly in front of its two big brothers is the new Skyhawk Limited Station Wagon.

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And put yourself into a little more wagon.

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BUICK

Wouldn't you really rather have a Buick?

Faces
Behind The Figures

Edited by Eamonn Fingleton

Taking the heat off

As head of the Amtrak railroad system, W. Graham Claytor Jr., 71, is confronted with a task that would have been formidable even back in the days when he headed the front-ranking Southern Railway. Year in, year out, he has to keep cutting the system's relative costs. "I've got to keep charging the government less every year," he says firmly. "So if we don't have first-class service, we won't have any service at all."

Amtrak's W. Graham Claytor Jr.
Take the train, not the plane.

Amtrak is the promotional name for the government's National Railroad Passenger Corp., that combine of consumer need and political expedience that inherited the ruins of the U.S.' once proud passenger railroad system. By its very nature, it regularly loses scads of money, so much so that Congress was forced to decree a few years back that Amtrak had to earn 50% of its costs by 1982. It managed to do that last year, reducing its losses from $720 million to $550 million, and Claytor expects it will be earning 55% in just a few years.

It will do that, he says, both by improving service (and so attracting more business) and reducing the system's sky-high costs. Claytor is putting refurbished dome cars back on the system, for example, improving food service with new menus and ice cream and shifting the California Zephyr from Wyoming to a spectacularly scenic route through the Rockies. He's even planning to offer autotrain service from Washington to Florida—at a prospective $4 million-a-year profit. By raising top speeds to 120 miles an hour, he aims at cutting 19 minutes from the Metroliner's 2-hour-and-49-minute New York-to-Washington schedule. At that speed, he says, nobody in his right mind will travel by air. "The only people who will take the plane are dyed-in-the-wool air enthusiasts." Maybe so.

At the same time, Claytor is cutting costs, sometimes dramatically, in whatever way he can. He is hoping to substitute buses for trains on the moneylosing 47-mile Tampa-St. Petersburg run, a notoriously difficult stretch of track that takes 1 hour and 40 minutes by train. He worked out a new labor contract to pay operating people by the hour instead of by mileage blocks. He has even arranged a deal to lease right-of-way to MCI for a fiber optics communications network, and operating rights to a Japanese-dominated company for a Los Angeles-San Diego bullet train.

A lifelong Democrat and a former Secretary of the Navy in the Carter Administration, Claytor concedes that Amtrak is woefully underused everywhere, except maybe in the Northeast Corridor. But he argues that the system is needed for defense purposes and could still carry World War II troop volumes if it had to. "The heat's off at the moment," he says, "but if we can't keep our revenue-to-cost ratio improving, the whole system is in jeopardy."—**James Cook**

Made in heaven

If computer maker James Skidmore Jr. is to be believed, he is offering the best of both worlds. The Seiko Series 8600, a microcomputer system he launched in November, boasts the engineering advantage of Japanese hardware (supplied by watchmaker Seiko) and all the "user friendliness" of American software. The latter is supplied by Skidmore's Science Manage-

The Seiko Series 8600's James Skidmore Jr.
A non-Japanese face at the top.

Faces
Behind the Figures

ment Corp., a New Jersey-based software and consulting concern. Add the instant recognition of the Seiko name, and Skidmore reckons he was already miles ahead of most hopefuls in the microcomputer derby before he sold a single unit.

The project began in 1981 when Seiko started casting around for American marketing help for a new computer line it was planning. Skidmore insisted that his Science Management Corp. should be a partner rather than just a distributor. That was asking a lot, given that, as he points out, the Japanese hate to give other people a say in running their businesses. Even so, Science Management ended up with 64% of the new joint marketing company for an investment of only $500,000. Seiko put up $2.2 million for the rest.

How come Skidmore pulled off such a sweet-looking deal? "We had the software they wanted," he says. "We were working on 16-bit configurations when most of our competitors were still thinking in terms of 8-bit. Our software is tailored for more sophisticated machines than most."

Skidmore, 50, who has ended up in computers after a spell with PepsiCo and the Junior Chamber of Commerce, is pitching the 8600 into a tough battlefield—the top end of the microcomputer market, where the Japanese have so far failed to make it big. Skidmore believes Seiko's reputation for precision gives an edge. Certainly price is not a big draw: A basic configuration costs a sizable $5,400.

Some might question how Skidmore expects to fend off competitors like IBM and Digital Equipment. But he hopes he can carve out a niche aiming straight at the business user. Stock market investors are certainly believers. Quoted on the Amex, Science Management stock shot from $4 in November to $28 in February before settling back to around $21.

Earnings, meanwhile, dropped from 62 cents to a minuscule 16 cents in 1982. Skidmore's comment is cautionary: "People are speculating. This venture is still at a formative stage, and so far we do not know how well the machines will be received by users."—**Ellen Benoit**

Publisher Terry Ehrich
Arriving on time.

Changing gears

It was love at first bite when Terry Ehrich heard that *Hemmings Motor News*, an obscure advertising monthly for car enthusiasts, was for sale.

"I have been an auto addict ever since I was 13, when I bought a Model A Ford," he says. "I could not believe my luck when I heard about *Hemmings*. It was just the sort of business to get me out of the New York rat race."

Ehrich, 41, an outdoorsy Vermont-born graduate of Harvard who was then selling ad space for the *New York Review of Books*, rounded up his savings and tapped two wealthy investors for the $300,000 purchase price. Few executives who have turned their hobbies into a business have done better. Since Ehrich took over in 1968, *Hemmings'* circulation has risen from 41,000 a month to 208,000. He has inched up the cover price from 25 cents to $2.50 and more than doubled ad rates. Now *Hemmings* and other publications he has since acquired have sales totaling $7 million.

And profits? "They are comfortable," he says guardedly. But industry observers reckon that *Hemmings* alone must chip in a couple of million. Despite its name, *Hemmings* contains no news—so no editorial budget.

Even so, when he took it over it was barely profitable after paying salaries to two staffers. "I could see the potential because I knew that antique cars was a growing field," says Ehrich. He could also see there was room to give advertisers better service. Under the old management, descriptions of cars occasionally got garbled in transmission—something that car enthusiasts do not easily forgive, particularly with several competing publications around. Ehrich introduced a complex copy checking system avoiding costly errors. And he made sure that publication dates were kept.

Until now he has relied largely on word of mouth to do his marketing. But circulation growth stalled last year, so Ehrich is planning to spend a bit on a direct mail subscription campaign. Meanwhile some other ventures, notably ailing *Small Boat Journal*, which he acquired in 1980, need work. But judging by the hours he spends tinkering with his 1946 wood-paneled Ford station wagon, Ehrich is not overwhelmed. Indeed, he is busying himself with plans for yet another new magazine on yet another enthusiasm—gardening.—**Walecia Konrad**

The new Medici

For philistines who question Philip Morris' massive spending on the arts, Chairman George Weissman has an answer. "More people go to museums than to ball games," he says. "In New York City alone, 64 million people went to cultural events last year."

Weissman, 63, an articulate former journalist who worked his way to the top via public relations, won't say what Philip Morris is spending in support of art, all told. But museum curators believe that for its size—sales of $12 billion last year—Philip Morris is one of the most generous corporations. It was one of the earliest corporate sponsors in the arts, and its spending has kept pace with its rapid sales growth over the years.

Promises made, promises kept.

Vhen Falcon Jet delivers so ;onsistently, why can't other nanufacturers keep their word?

Good question—why can't they?

If they've got all that technology, vhy can't they tell you in advance ıow far their new business jet will go, ıow fast, or how much it will weigh?

Falcon Jet can. Because we've got he engineering to back it up. And the echnology to keep on building in mprovements from the time we ınnounce a new model to the time he FAA certifies it. So the early buyer ıctually gets a better airplane than ıe ordered.

Remember the jet that was ;upposed to fly 4000 nautical miles ıonstop at Mach .80? Now that it's flying, we find it's 25% shorter in range, 10% slower in speed and 7,900 lb overweight. Those were promises made, but not promises kept.

The newest Falcon makes the point again

Take the Falcon 200, for instance. FAA certified on July 6, 1982, it does everything we said it would—and more.

It goes farther, takes off shorter, is quieter and uses less fuel. Not since the Falcon 50 was certified in 1979 has a new business jet so significantly exceeded its performance guarantees.

Performance vs. specsmanship

Ever notice how the competition talks about flying from Los Angeles to New York, and not the other way around? Maybe that's because they haven't designed and certified a plane that can span the continent westbound, against prevailing headwinds.

Except for airplanes in the Falcon 50 class, the Falcon 200 is the only business jet capable of flying from New York to Los Angeles nonstop, against the 85% probability headwinds the airlines use for flight planning, with eight passengers, baggage, and NBAA VFR reserves.

By the way, it not only gives you longer range than anything else in its class but also a far larger cabin. If you're interested in business aircraft, why not start at the top? Falcon Jet has the only full line of business jets, the ones flown by more Fortune 1000 companies than any other kind. And our record of delivering new aircraft which actually perform as promised (or better) is unsurpassed.

Use the coupon below or call Roy Bergstrom, Senior Vice President Marketing, at 201-288-8479.

'alcon 200 performance comparison

	Initial announcement in June, 1981	FAA certification July 6, 1982
ange[1]	2450 nm	2600 nm
hrust ıer engine)	5050 lb[2]	5200 lb[3]
akeoff unway (BFL)	5250 ft	4650 ft
akeoff noise EPNdB)	85.5	83.9

8 passengers, crew, baggage and NBAA VFR reserves.
At sea level, 76° F.
At sea level, 80° F.

FalconJet™
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☐ Call me about the benefits of purchasing a Falcon Jet now.
☐ Send me information on Falcon Jet aircraft.

Name _____ Title _____
Company _____
Address _____
City _____ State _____ Zip _____
Phone( ) _____
Now flying a _____ FB5/9

We do more than keep our promises. We exceed them.

Faces
Behind the Figures

Among its splashy current offerings is the Metropolitan Museum of Art's big New York exhibition of art treasures from the Vatican. The show, which opened in February and continues until June, is costing Philip Morris $3 million directly—and related advertising support will probably total almost as much.

Meanwhile Weissman has given New York's Whitney Museum the use of most of the first four floors of Philip Morris' new headquarters building, opposite Grand Central Station, which means he is passing up nearly $1 million in rents.

It all seems a long way from selling Marlboro cigarettes and Miller beer. But even if sponsorship does not directly boost market share, Weissman reckons he is getting a rich payoff in corporate morale. "We are a creative company," he says, between puffs on a Merit cigarette. "By putting ourselves in a creative mode we say something about ourselves. It encourages our people to be creative, to come up with things like Miller Lite, the first light beer, and Virginia Slims, the first cigarette brand for women. There are people who think of our businesses as sin industries. Every corporation likes a good image to get good people to work for it."

It helps that Weissman, whose craggy, weather-beaten features make the Marlboro man look a tenderfoot by comparison, is a keen art collector himself. The magpie's nest of treasures he keeps in his office includes a Picasso drawing. But just to show he means business, he gives pride of place to an impressionistic view of a cowboy. The painting is by his wife, Mildred, and shows a Marlboro man lighting up.—E.F.

The Playboy Channel's Paul Klein
A beginning, a middle and an end.

George Weissman of Philip Morris
Art for morale's sake.

What do women want?

Nubile bunny types frolicking in hot tubs are standard fare on the six-month-old Playboy Channel. That may be fine with male viewers of the pay-TV channel. The problem is that 40% of the people watching are women, and they are getting bored with male fantasies, says Paul Klein, Playboy Channel president.

Given Playboy's image, doing something about that might seem to be an even bigger problem. But Klein is not dismayed. Unlike Sigmund Freud, he thinks he knows what women want. "They want story lines—beginnings, middles and ends," he says. "They want characterizations. They want human justifications for viewing."

Klein would be offended, though, if anyone thought him idealistic about his medium. As an executive vice president at NBC during the Seventies, he came up with the theory of the "least objectionable program"—i.e., that people turn on their sets for the sake of watching TV, settling for programs they can stand rather than finding something they like.

Mind you, too, Klein has a specific kind of women's programming in mind. Take, for example, the Playboy Channel's new sit-com series, *4Play*. It's about a wife's discovery of her husband's affair with a 19-year-old girl. The wife comes off as strong-willed and savvy, the husband as an infantile wimp. But there are also some unclad female torsos and some strong language thrown in to keep the men interested. Other women's programming, Playboy-style, includes *Dr. Yes—The Hyannis Affair* (a spicy Claus von Bülow-type story), a series on sexual fantasies by author Nancy Friday and perhaps a talk show hosted by Erica Jong.

The Playboy Channel's parent, Playboy Enterprises, Inc., lost $52 million on revenues of $210 million last year, and *Playboy* magazine circulation has slipped to 4.5 million, from 5 million a year ago. So the 54-year-old Klein's efforts to expand the market in cable TV is of some impor-

tance. "It's not unreasonable to hope that in the near future the earnings from Playboy's programming will be our single greatest source of earnings," says Christie Hefner, Playboy Enterprises president.

Klein has big plans to bring that about. This summer *Fanny Hill*, a movie based on the erotic novel, will debut on the Playboy Channel, play in theaters and then appear on cassettes. And someday, he says, savoring the irony, "I think we should make such a blockbuster miniseries that people will say, 'God, this is as good as the networks.' "—**Jon Schriber**

The prestige of the thing

Examining a wooden duck in Abercrombie & Fitch's natty Houston gift department, Alvin Lubetkin explains the difference between A&F and its new parent, Oshman's Sporting Goods. "If this duck retailed for $150, the Oshman's buyer would say to the wholesaler, 'Can't you find me one for $50?' The Abercrombie's buyer would want one with gold inlay for $500."

Lubetkin, 49, has more than passing interest in all this because he is CEO of Oshman's, the Houston-based mass marketer of sporting goods that brought the prestigious 90-year-old A&F out of bankruptcy court in 1977 and has been working to restore it to its former glory ever since. Oshman's has opened 12 new A&F stores across the country, and next year plans to bring Abercrombie & Fitch back to New York, where it has been extinct for the last six years.

The big imponderable, of course, is how well a purveyor of sneakers and sweat pants will do over the long run with A&F's $150 ducks, let alone its $25,000 handcrafted Italian rifle set. There's no question of Lubetkin's ability to sell to the middle market. In his 13 years as chief executive, Oshman's sales have gone from $19 million to $247 million and its earnings from $883,000 to $7.5 million. But Abercrombie & Fitch is an entirely different proposition. One recent afternoon the Houston store's ten salespeople—each, as always, dressed for his own specialty, from tweeds to rugby uniforms—had a grand total of three shoppers to attend to. Hardly your mass-market customers, though. One was the wife of a wealthy natural gas executive and another was Princess Caroline of Monaco.

This is heady stuff for a mass retailer. Lubetkin admits Abercrombie's flossy ambience exerted a powerful attraction on him. "Everybody in the retail business always thinks they'd like to sell better merchandise," he says. But he adds: "I'm not letting my emotions carry me away."

That would surely be a mistake. So far, A&F has generated nothing but red ink for Lubetkin. It lost $300,000 last year on $16 million revenues. He is hoping results will improve as the new outlets mature. He points out that annual sales in the first of the new A&F stores, opened in Beverly Hills in 1979, are over $200 per square foot, better than the average Macy's. If all goes as Lubetkin plans, A&F will be in the black this year. If not, that prestige could be mighty expensive.—**Jessica Greenbaum**

Abercrombie & Fitch's Alvin Lubetkin
A shot in the dark?

Own a bottle.

It's worth the price to have at least one thing in your life that's absolutely perfect.

Tanqueray Gin. A singular experience.

IMPORTED ENGLISH GIN, 100% NEUTRAL SPIRITS, 94.6 PROOF
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Once our transatlantic flights take off each evening, you'll be leisurely wined and dined.

You'll whet your appetite with champagne and caviar. Tempt it with an entree like Chateaubriand. And sate it with a fine ripe cheese or deliciously rich dessert.

You'll satisfy your thirst with a vintage wine from France or California. Or with a selection from our cognac and fine liqueurs.

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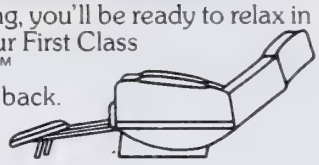
Room with a view.

After dining, you'll be ready to relax in comfort in your First Class Sleeper-Seat.℠



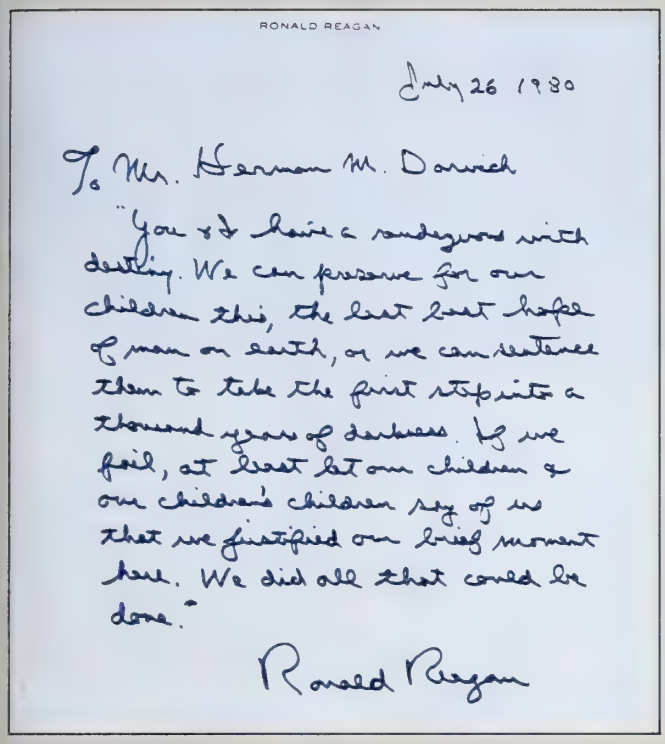
Just settle back. The seat stretches out with you for a restful sleep under the stars all the way across the Atlantic. You'll awake refreshed—ready to face the new day.

So call your travel agent, corporate travel department, or TWA.

And experience for yourself the five-star quality that gives TWA's Royal Ambassador Service the mark of excellence.

You're going to like us TWA

President Reagan's handwriting
"Not an in-depth or scholarly thinker."



RONALD REAGAN

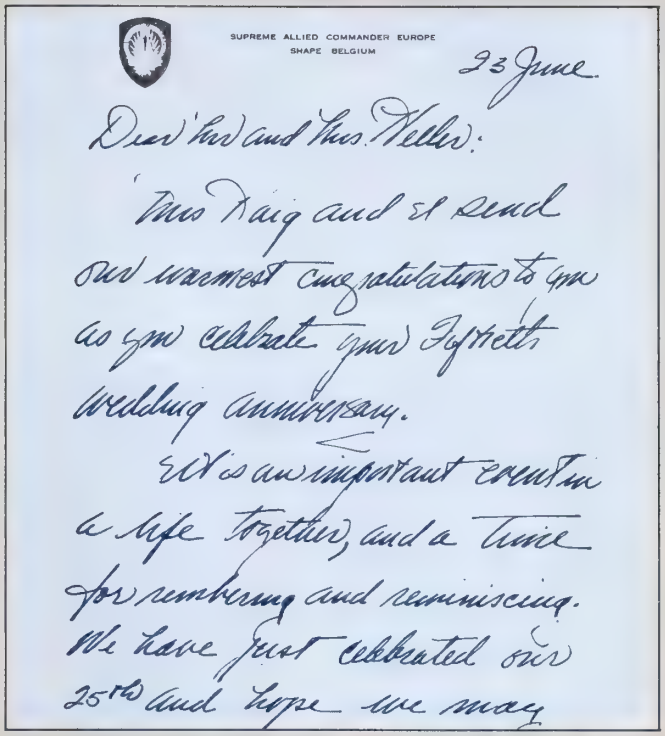
July 26 1980

To Mr. Harmon M. Dorrich

"You & I have a rendezvous with destiny. We can preserve for our children this, the last best hope of man on earth, or we can condemn them to take the first step into a thousand years of darkness. If we fail, at least let our children & our children's children say of us that we fulfilled our brief moment here. We did all that could be done."

Ronald Reagan

The writing of ex-Secretary of State Alexander Haig
"Very decisive, ultrapositive and very enthusiastic."



SUPREME ALLIED COMMANDER EUROPE
SHAPE BELGIUM

23 June

Dear Mr and Mrs. Weller:

Mrs Haig and I send our warmest congratulations to you as you celebrate your 50th wedding anniversary.

It is an important event in a life together, and a time for remembering and reminiscing. We have just celebrated our 25th and hope we may

Handwriting analysis is cheaper and simpler than psychological testing. And those who use it swear it works.

Personal Affairs

Edited by William G. Flanagan

Write you are

By Laura Rohmann

THIS YEAR hundreds of U.S. companies will use handwriting analysis as an aid in hiring and promoting employees. That's right—handwriting analysis.

Graphology or graphoanalysis—determining personality and aptitudes by the way a person dots his "i" or crosses his "t"—has long been used in Europe. In fact, it is not unusual for European companies to have full-time graphologists on the staff to help personnel officers read between the lines. But in the U.S., it has usually been categorized with tea leaves and crystal balls—until recently. Now thousands of employees and prospective employees are screened via graphoanalysis, and many employers who use such services swear they work.

At MDP Data Processing in Manhattan, for example, President Joe Corace says he uses handwriting analysis for hiring at all levels, from clerks to management. So does Steve Suddeth, who has managed Connecticut Mutual Life Insurance agencies in Los Angeles, Omaha and Dallas. "I haven't hired an agent without it for the last eight years," he says.

Bob Garvey, general manager of Phillips Supply Co., a Cincinnati-based cleaning supplies seller and maintenance contractor, recalls how Phillips President Charles Phillips once met an impressive young man at a cocktail party and suggested he apply for a sales job. Several Phillips managers interviewed the man and found him just as impressive. But a routine handwriting analysis showed another side to the man. "His integrity is not intact," the graphoanalyst said. "He'll steal everything that is not nailed down." Phillips decided not to hire the man, and a few months later, says Garvey, "we learned that this guy had arranged to leave the company he was with and had taken some procedures from them and started a competing business in violation of his work contract."

How does handwriting analysis work? Say an employer is screening applicants for a job opening. He gathers handwriting samples from each applicant, usually with his knowledge and consent. The samples—a minimum of ten lines of writing—are sent to a graphologist. The expert receives no personal data about the applicants, but is told the job title, description and qualifications. Each analysis

Personal Affairs

takes from two to eight hours to perform, and usually costs $50 to $200 per sample. The report comes back either in the form of a written summary, a standardized form on which the analyst checks off certain characteristics, or a dictated cassette tape of the analyst's impressions.

Phillips Supply, for example, asks applicants to take an application form home, fill it out, write eight to ten lines about their qualifications or why they want the job, and mail it back to Phillips. That way, the applicant's interviewing jitters don't show up in the writing sample, says Garvey. The samples are then sent to Frank Budd, a Phoenix-based graphoanalyst with some 150 corporate clients, 80% of them insurance agencies. For $50 per sample, Budd makes a cassette tape that includes traits and skills analyses, and a job performance ranking on a scale of one to ten. "We don't follow it 100%," says Garvey. "We get the information and make our own judgment. But over the years we've had excellent results. We've hired 15 or 16 salespeople on that basis. On the surface, a couple of these people did not look like they would be successful in sales, but they turned out to be very successful."

Modern graphoanalysis began in the 1920s, when shorthand teacher Milton Bunker noted marked differences in shorthand styles despite identical instruction and began studying them. Then Bunker studied chiropractic to understand how the muscles affect the brain.

What do the graphoanalysts look at? Slant, pressure, rhythm, and width and height of characters are all important. Slant reveals a person's emotional makeup, says Sheila Kurtz, president of the Manhattan-based graphoanalysis firm A New Slant. The more the script leans to the right, the more demonstrative and passionate the individual. Leftward leaning script denotes an emotionally inhibited individual, says Kurtz. This is true for both right- and left-handed people.

The strokes in individual letters can also depict traits. The tops of "m" and "n" reveal thinking patterns. A rounded m-top shows a slower, methodical thinking pattern; a v-shaped m-top reveals an investigative thinker, while sharp, needle-pointed m-tops denote a fast, comprehensive thinking pattern.

The way a person crosses his "t" reveals his goals *(see illustration above)*. If the t-bar soars above the stem of the "t," the writer is a somewhat unrealistic dreamer. A t-bar sitting right atop the stem shows ambition; halfway down shows a practical personality, and more than halfway down shows low self-esteem. If the t-bar sweeps across the stem, the person is enthusiastic.

Of course, no indicator can be used alone, and some indicators may contradict others. But when a full analysis has been completed, the personality picture can be extremely precise, say some users of graphoanalysis. Notes Phil Wizer Jr., owner of Thrifty Rent-A-Car franchises in Phoenix, Omaha, Tucson, Des Moines and San Diego, "I can't think of a situation where it wasn't quite accurate. In fact, it's surprising just how accurate it is."

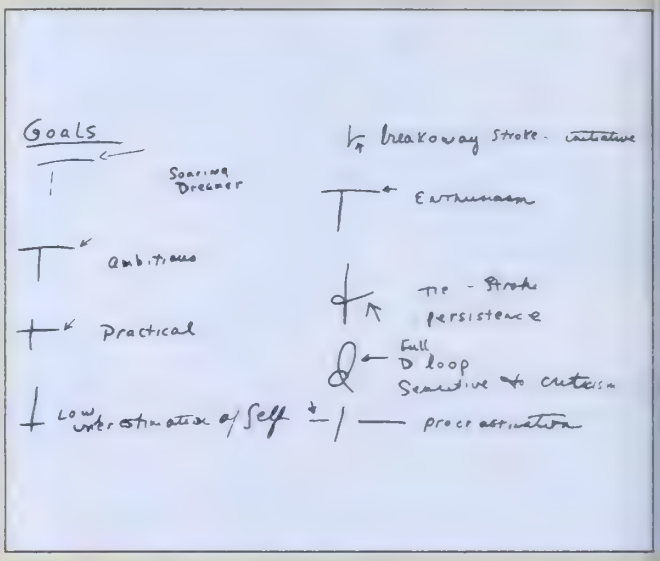
Alvan Lichtenstein, owner of Alvan Oldsmobile of Cherry Hill, N.J., has been a Kurtz client for five years. He says Kurtz once told him that the graphoanalysis of a manager up for a promotion indicated the man had something on his mind. When Lichtenstein asked, the manager told him his mother-in-law was ill. Another applicant, Kurtz said, was "susceptible to being highly physical." Later, an acquaintance commented on the man's terrible temper. "It's uncanny," says Lichtenstein. "It's just too close to be a guess."

Still, handwriting analysis is far from a generally accepted hiring procedure. And even those corporations that use the technique can be relucant to talk about it. The taint of the occult remains. Applicants, too, sometimes balk at the idea. "I told a prospective agent we were going to have his handwriting analyzed," says Suddeth, "and he said, 'Are you going to read my tea leaves too?' "

But Suddeth understands; he had to be convinced in the beginning, too. As a test, he sent in a sample of his own script without identification. "The report hit the nail on the head," Suddeth says. "It went through all the reasons why I would be a crummy agent and all the reasons why I should perhaps consider management. That convinced me."

Handwriting analysis is both simpler and less expensive than psychological testing, Garvey points out. "We used to use these four- and six-

Graphoanalyst Sheila Kurtz
The hand unlocks the personality.



Various ways of crossing the letter "t"
One of the more revealing letters.

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Personal Affairs

and eight-hour batteries of personnel tests," says Garvey. "We would get a lot of information, most of which was neither understandable nor useful to us in the selection of people. But the handwriting reports come in very plain, straight language. And they tell us such things as what will make this person motivate himself, how he'll react to certain kinds of management and how he'll do in training."

It's that insight into the person's basic personality that graphology clients contend they find most valuable. Corace, who runs a labor-intensive company with small quarters, says graphology helps him select people who will be compatible. Kurtz says she often advises executives on how to work more effectively with their assistants. One CEO complained that his assistant wasn't getting the work out fast enough. Analysis showed the assistant to be a methodical thinker, Kurtz says, while the CEO's needlepoint m-tops showed he was a fast thinker. The CEO started giving the assistant work in smaller batches instead of large piles, and the assignments were completed on time.

Kurtz believes such operational counseling could have helped smooth the rough edges between President Reagan and former Secretary of State Alexander Haig. Even the layman can spot the striking differences in the two scripts *(see p. 185)*. According to Kurtz' analysis, Haig's slant to the right shows the dominance of his emotions, while Reagan's upright script shows emotional control. "Haig's emotions got in the way," says Kurtz. "With Haig, his thinking is never detached from his emotional reactions, and he can jump to conclusions because of this. Reagan's emotions never get in the way. He faces every situation with calmness and composure."

The pointed "m"s and "n"s in Haig's script show his keen insight

More light on the subject

To test the validity of handwriting analysis, FORBES gave identical copies of the handwriting of Thomas Edison to two graphologists independently. We wanted to determine how accurate their analyses would be, and whether they would be in agreement.

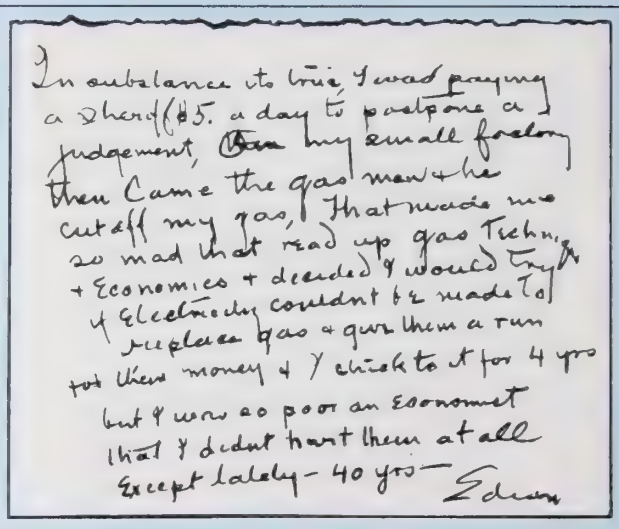
The test sample, from FORBES' archives, was a note from Edison to FORBES' founder B.C. Forbes *(see illustration)*, in which the inventor recounted how his anger at the gas company for turning off the gas in his factory prompted him to start working on the incandescent electric light. Of course, the graphologists received an edited version of the memo to keep it from being too revealing.

The results? The two analyses were amazingly similar, even using the same terms to describe letter formations and personality traits. Felix Lehmann, a German-born graphologist and documents expert whose clients have included Merrill Lynch, Prudential Insurance and Wells Fargo, pointed out the angular "m"s and "n"s that "denote a man who does not look for the easy way out but enjoys overcoming difficulties and resistance."

The other expert, Marie Bernard, also German-born, coauthored *Anatomy of Evil* with Charles Hamilton, for whom she prepared over 160 analyses of Nazi leaders. She also noticed the angular "m"s and "n"s—the mark of a person who "likes to overcome obstacles. He has a lust for fighting."

Both graphologists also noted the Greek "E" that appears in the words "read" and "technique"—a sign that the writer has a love of study and literary pursuits. And both said the "lyrical 'd' " as it appears in the words "read," "decided" and "would" marks a taste for poetry, philosophy and self-reflection.

Both Lehmann and Bernard also said the writing indicates a reason-dominated, practical, active and creative man. "His long t-bars show determination and willpower to bring plans to fruition. He always plans," said Lehmann. Bernard noted that the extended t-bars show a domineering personality, while the straight, spear-like lines of the "y"s indicate "persistency and tenacity that borders on a compulsion for perfection." She added that t-bars flying to the right of the stem as in the words "postpone" and "true" represent a future orientation.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a Shard (\$5. a day to postpone a
judgement, ~~Then~~ my small foolery
then Came the gas man & he
cut off my gas, That made me
so mad that read up gas Techn.
+ Economics + decided I would try
if Electricity couldnt be made to
replace gas + give them a run
for their money + I stuck to it for 4 yrs
but I was so poor an Economist
that I didnt hurt them at all
Except lately - 40 yrs — Edison

Thomas Edison's note to B.C. Forbes

This note confirms the story that his anger at the gas company spurred him to invent the electric light. Edison's writing tells much to graphologists. "He's someone who lifts up his hand in question," said one.

The two graphologists did not agree on everything, however. "It's amazing that this cultured, highly intelligent and well-balanced personality would write odd and unusual letter formations like the 's' in sheriff, the '\$' sign and the capital 'I,' " said Lehmann. "It is my hunch that these are ideographs [symbols] of contraptions that he is closely connected with in his daily work."

Bernard had different ideas. She said the well-formed upper part of the capital "I" symbolized the continuing influence of the writer's mother image. The tight encircling of the capital "I," the "c" in "came" and the "s" in "sheriff," she said, could possibly represent encapsulation, isolation and solitude.

Both said the writer was a person of great intelligence, but Lehmann made a further distinction. The script shows achievement, he said, rather than the signs of genius present in the handwriting of Mozart and Beethoven.—L.R.

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An eminently successful timepiece from Corum.
The authentic $20 Gold Piece, quartz and water-resistant.
Hand-crafted in Switzerland.
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square inches of swept brake
contribute to sure, straight
ping.

help control bounce and body
ement, Continental is equipped
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a car that remains poised, no
matter how unsettling or unpredictable the world may be.

Continental. For people who like to be in control.

1983 CONTINENTAL

LINCOLN-MERCURY DIVISION. Ford

Get it together–buckle up.

Personal Affairs

and ability to understand things immediately, Kurtz says. "He's a very fast thinker. But he can also be analytical, which will slow that impulsiveness," she says. "Reagan is not an in-depth or scholarly thinker. He works on an immediate problem and will use others to probe." High, strong t-bars show ambition and willpower in both men, says Kurtz. Both are self-starters, but Haig's downstrokes and stems are stronger and straighter than Reagan's, showing his great determination. "Haig's very decisive, ultra-positive about decisions and very enthusiastic," says Kurtz. "He has tremendous self-confidence. Reagan's determination may fade, and he needs strong people to follow through."

Of course, it's easy to make graphology look accurate when analyzing public figures. But the real proof to those who use it is that they keep coming back for more. Says Suddeth, "We don't like spending $50 as often as we do for the fun of it. And after eight years, I can assure you we would not be using it if it did not have high validity and wasn't a meaningful tool to us."

Hasty hearts

The miracles that heart surgeons work—thousands of successful coronary bypass operations are now performed each year—may be encouraging to sufferers of advanced heart disease. But they could also be giving false comfort to healthy people with unhealthy habits.

"A lot of people nowadays would like to believe that they don't really have to take care of themselves, that they can go ahead and damage their heart, and the damage will be found out and they'll have a bypass and everything will be magically normal again. I think that's a very dangerous misconception."

This warning comes from Dr. Norman Kaplan, professor of internal medicine and head of the hypertension section at the University of Texas' Southwestern Medical School. "It's only human nature," he observes. "We would rather depend on some magic moment to take care of all of it than make the more mundane changes in lifestyle."

In his recently published book, *Prevent Your Heart Attack* (Scribners, $12.95), Kaplan examines the causes of heart attacks, strokes, high blood pressure and other coronary woes, and prescribes reasonable changes in personal habits to prevent them. The good news is that few of his suggestions involve the gut-wrenching changes that many heart-care programs advocate these days.

"I think a lot of adults believe that they have to beat up on themselves in order to get into shape," he says. "That's an inappropriate way to look at it. You can be comfortable and live a normal life. Just be cautious in your drinking and diet and exercise. I really think that one can accomplish a lot more that way than by going on some of these crazy fad programs that just don't last very long."

But one absolute no-no for Kaplan is cigarette-smoking, which he labels "the single most preventable cause of cardiovascular disease." He points out that fewer than one-fourth of the roughly 325,000 smoking-related deaths in the U.S. each year are due to lung cancer. Most of the rest are cardiovascular in nature, mainly because of two components of cigarette smoke—nicotine and carbon dioxide. (There are about 4,000 others.)

The more you smoke the more trouble you will have. The rate of heart attack for white males aged 30 to 59 almost triples for those who smoke one pack or more a day. (Snuff, chewing tobacco, pipes and cigars present much less serious health problems, unless smoke is inhaled.)

Will low-tar and low-nicotine cigarettes lessen the risk? No, says Kaplan. In fact, they could be worse. Smokers are likely to smoke twice as many cigarettes to get enough nicotine to satisfy the craving.

Kaplan applauds all quit-smoking programs, but adds, "What is essential is your unequivocal commitment to quitting. If you really aren't ready, it's unlikely anything will work permanently. It's just too easy to start again." (If you read the book, you will have plenty of motivation to kick the habit. After all, 15 million Americans have already done so.)

High blood pressure—also known as hypertension—is another major contributor to coronary disease, especially stroke, Kaplan contends. What makes this ailment particularly deadly is the absence of symptoms. Undetected and untreated for 15 or 20 years, he says, high blood pressure is like "the slow buildup of water behind a new dam. Not until the water flows over the top may we be aware of the massive accumulation."

To lower blood pressure, Kaplan prescribes shedding excess weight, cutting back consumption of alcohol and salty foods and following a regular exercise program.

As for the usefulness of exercise, Kaplan is sympathetic to the desk-bound executive. He knows how difficult it is for people to stay on a tight regimen. So he advocates an increased level of things like walking, stair-climbing and package-carrying—"all of the things you are now doing with the aid of cars, elevators and golf carts." One regimen for beginners is a 15-minute walk (or jog, bike-ride or swim) every other day, gradually increased to 20-to-60-minute sessions five times a week.

Executive gym at Chemical Bank's New York headquarters
An ounce of prevention. . . .

Acknowledging that little is known about the relationship between stress and heart disease, Kaplan devotes only a short chapter to its causes and treatment. However, he does cite a study that attempts to show what types of events are likely to be most stressful. In the study, 394 people rated various events for the level of stress they caused. As a point of reference, getting married was assigned an index of 50. The ratings range from 100 for the death of a spouse down to 12 for Christmas and 13 for va-

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cation. Trouble with a boss scored 23, sex difficulties 39 and divorce 73.

The book contains some surprises. One is Kaplan's belief that extra body weight of 10 to 20 pounds does not endanger health. (However, those who are 15% to 20% below average weight could be in for heart trouble.) Another is his belief that two baby aspirins per week can help the heart. This dosage, he says, blocks the formation of the hormone thromboxane, which obstucts blood flow within vessels.

Also somewhat surprising is the notion that successful people—who are thought to be exposed to plenty of stress—are less likely to die of heart problems than the general population. Drawing exclusively from *Who's Who* listees, Kaplan demonstrates that successful people have a 30% greater life expectancy rate than the general population. Subgroups of the *Who's Who* group included scientists, who proved to have a 45% advantage, college professors 39% and business executives 29%. The only group at a disadvantage was successful journalists, with a mortality rate 34% higher than the general population.

Kaplan also has some good news for social drinkers. One or two ounces of alcohol per day, he says, can be beneficial to an adult. One apparent reason: decreased psychological stress. Says Kaplan, "There is no good information about this, but it does seem logical."—**Kevin McManus**

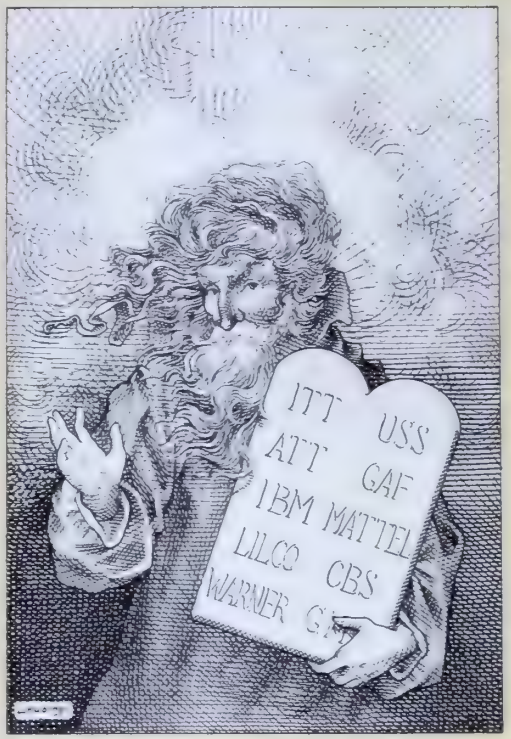
How to pick 'em

A child or relative asks your advice about investing in the stock market. What can you suggest?

There are plenty of self-help manuals and programs (including one offered by FORBES). But what, in the interim, can you offer in the way of solid principles to follow?

Dick Davis, a Miami-based broker with Drexel Burnham Lambert and, more recently, a market-letter writer, laid down some of his own guidance in a recent issue of the *American Association of Individual Investors Journal*. While allowing that "the market is a mass leveler of human ego" and that "there is probably no other human endeavor pursued by so many people in which so few are consistently successful," his rules, he says, have withstood the test of time—or at least his own 25 years of market watching. Samples:

- Buy the strongest stocks in the strongest groups—preferably on a market pullback. On a short-term basis, trade from the list of new highs. The odds are much greater that a stock going up will continue to go up.
- When you hit a winner, let it ride. To get in early and ride a stock a long way is something rarely done; most people don't have the will to resist taking small profits.
- The most vocal majority opinion is invariably wrong. Practically every major stock market advance has begun when pessimism was loudest and prices lowest.
- Almost every portfolio is hit by a few big losses that more than offset the winners. Avoid this by limiting losses through stop-orders. That way you can be wrong more often than you are right and still be a winner.
- Picking the right group may be more important than picking the right issue. Conversely, if a group is out of vogue, even the best stock in it is going to have trouble.
- No stock *has* to be bought. The market will always be there. For the investor, there is always another stock and another day.
- It is unrealistic to expect to have up years consistently. The trick is to nail down substantial profits in good years and preserve capital in bad ones.



- Know when to sell—probably the most difficult of market skills. Every stock is a sale at some point. There are no more sacred cows, and a recommendation to sell AT&T is no longer heresy.
- Instead of shooting for capital gain, most of us would probably be better off if we concentrated on building a longer-term portfolio. Decide on some growth industries—cable television and genetics, for example—and buy the industry leaders on weakness. The key is to keep adding to your position so that with the aid of splits, you wind up with a meaningful number of shares.
- Never underestimate the power of compound interest. A fixed-income investment that throws off 12% a year, compounded annually, will double in six years. Even allowing for tax liabilities, this compares very favorably with the performance of most stock portfolios.
- Electric utilities probably should be singled out as having the broadest appeal of any one group in the stock market. Reason? They offer a safe, high yield with an excellent chance of periodic dividend increases.
- Employing contrary opinion theory works best when it is the most difficult to do—i.e., at or near market tops or bottoms.
- Condition your emotions to take losses. Taking losses is not a probability, it is a certainty.
- Some investors are simply born losers. If you know any, invest opposite them.
- In selecting a portfolio, lean toward concentration instead of diversification. By spreading out all over the place you reduce your risk, but you also limit your gains. Own enough of a stock so that if it is a big winner it will mean something in dollars and cents.
- Pay attention to what the best economic forecasters of Wall Street are saying—free (for example, Robert Farrell of Merrill Lynch; Henry Kaufman of Salomon Brothers, etc.). Some advisory services have compiled excellent track records, among them Stan Weinstein, Martin Zweig, John Westergaard, Anthony Boeckh, Richard Russell and Charles Allmon. And, oh yes, Dick Davis, whose Dick Davis Digest is also available, first copy free. Write P.O. Box 2828, Ocean View Station, Miami Beach, Fla. 33140.—**W.G.F.**

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Depart	Arrive	Service	Depart	Arrive	Service
8:50a	**10:59a**	**Nonstop**	**7:30a**	**2:50p**	**Nonstop**
6:30p	**8:40p**	**Nonstop**	**12:00p**	**7:30p**	**Nonstop**
Pittsburgh to San Diego			**And Back**		
Depart	Arrive	Service	Depart	Arrive	Service
6:30p	**9:10p**	**One-stop**	**7:00a**	**3:02p**	**One-stop**

USAIR

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Database publishing sounds glamorous, and it is. But it also might be a trap for eager, unwary competitors.

Technology for technology's sake?

By Jeff Blyskal

ON-LINE DATABASE publishing, you keep hearing, is one of the hottest things to come along since Gutenberg. Computer technology and a telephone have combined "to put the world's information at everyone's fingertips," as one eager marketer tells it.

Claims like that sound overstated, but they aren't. What may be overstated, however, is the perceived business potential.

The idea that so much information can be used by so many so easily has created a stampede. On-line database publishing, already a $1.2 billion-a-year industry, is growing nearly 30% annually. That expansion is a big reason companies like Dun & Bradstreet and McGraw-Hill enjoy stock multiples several points above other publishers. It is also why outsiders as diverse as Mead Corp., H&R Block and Lockheed are moving in. "On-line database publishing," says one participant, "is hot—very hot."

Excitement aside, few are making much money in this glamour business. The *New York Times*, for example, recently ended its ten-year experiment running database computers with $10 million in losses. Ziff-Davis has sold its Wharton Econometric Forecasting, which lost $10 million in three years. Meanwhile, broader services such as Lockheed's Dialog, Block's CompuServe and Reader's Digest's Source Telecomputing are hovering near breakeven.

Normal startup costs are part of the problem. But a fundamental misjudgment of the market may be as much to blame. Database publishing is so new, almost everyone is flying blind. "There is a trap here," explains Robert Weissman, who runs Dun & Bradstreet's information services division. "Companies are offering the technology simply because it's exciting."

Executives at the *Times*, for example, thought they could offer 2 million abstracts of newspaper articles and set

Disk storage units at Data Resources Inc.'s facility in Lexington, Mass.
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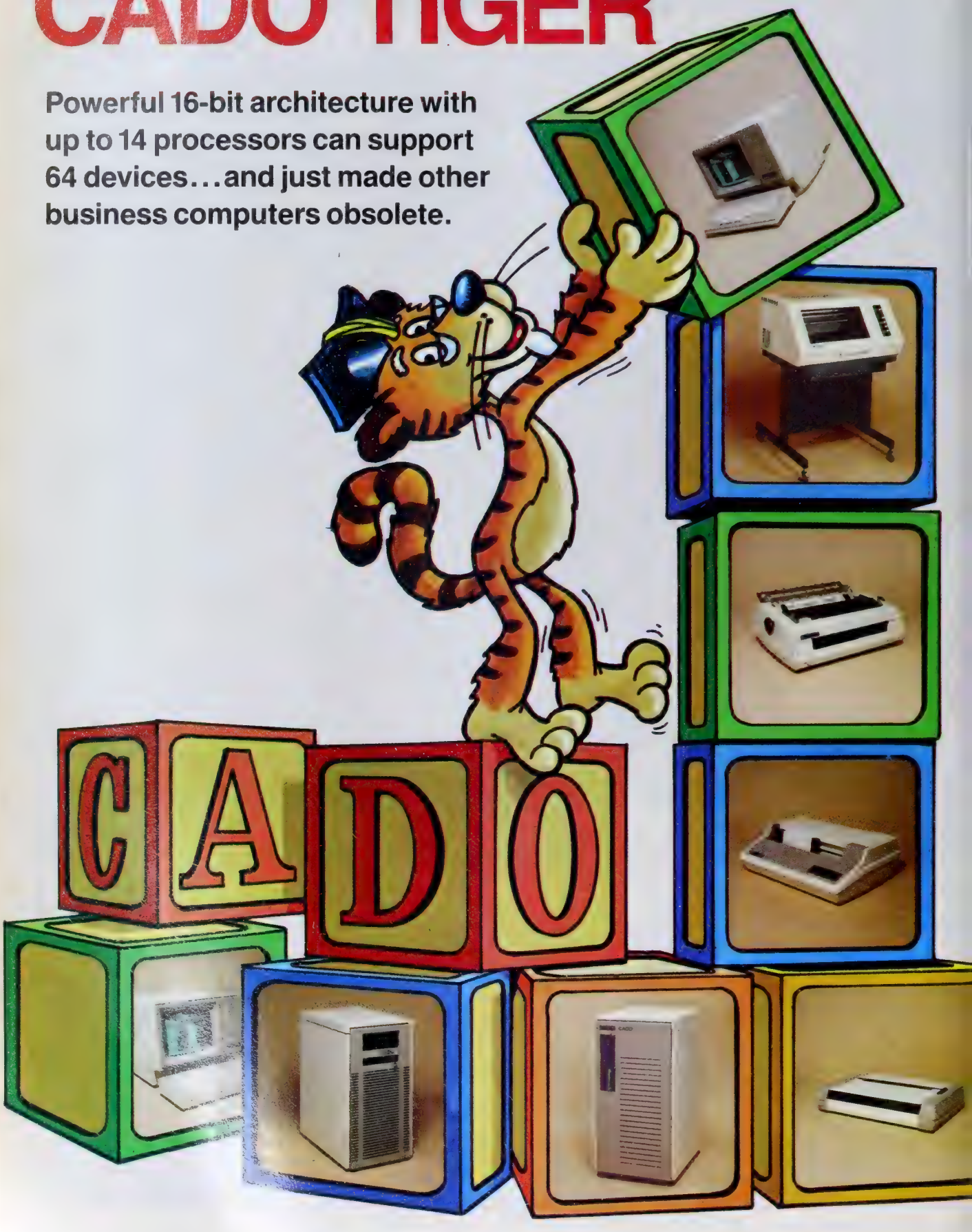

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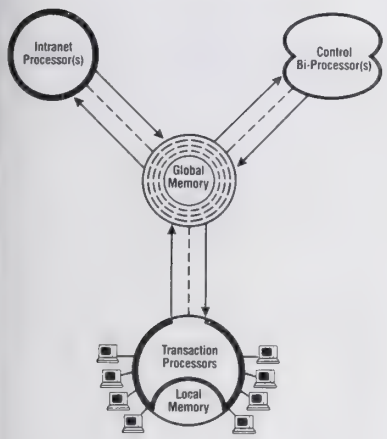

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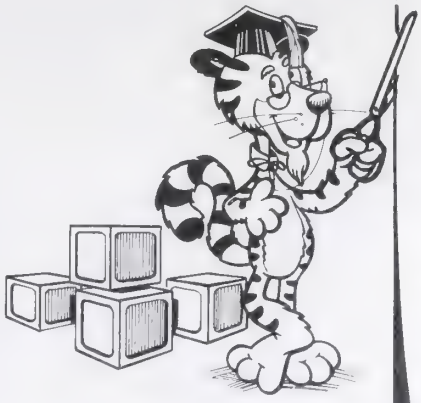

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Who's on-line

This table lists the 20 major database vendors. As the numbers indicate, customer counts do not always indicate who is getting the most revenues. And revenues, unfortunately, do not tell who is making money. That's a closely guarded secret everywhere, since database operations get buried in large accounting units.

Parent company	Service	Est 1982 revenues (millions)	Subscribers 1/1/83	Principal information
Quotron Systems	Fincl Information Svcs	$120	50,000	corporate data
McGraw-Hill	Data Resources	100	3,000	business, economic data
Dun & Bradstreet	DunSprint	75	6,000	corporate credit reports
Reuters	Monitor	65	13,000	general news, commodity data
Mead Corp	LEXIS/NEXIS	62	4,000	legal citations, articles, general news
Dow Jones	Dow Jones News Retrieval	50	60,000	general news, corp data
Planning Research	Multiple Listing Service	40	9,000	real estate listings
OCLC, Inc	OCLC	40	5,000	bibliographic data
H&R Block	CompuServe Information Service	40	38,000	general news, encyclopedia
Knight-Ridder	Commodity News Service	30	8,000	commodity data
Lockheed	Dialog Information Svcs	30	19,000	article index, financial data
I P Sharp	Sharp APL	20	6,000	corporate data
Reader's Digest/ Control Data	The Source	7	27,000	general news, air schedules, retail catalogs
Thyssen	Bibliographic Retrieval Svcs	7	8,000	academic indexes
Natl Library of Medicine	Medlars	4	3,000	medical, bibliographic data
Equifax	Financial Control Services	NA	28,000	consumer credit data, vehicle accident reports
Allied Corp	Market Decision Sys 7; Telequote; Teletrade	NA	25,000	stock prices
Burroughs Corp	Sys Dev Corp Search Service	NA	8,000	scientific, technical data
General Electric	Mark III	NA	7,000	financial, scientific data
British Telecomm	Prestel World Service	NA	25,000	general news

up an expensive computer system. But competitors like Mead offered more publications. The *Times* venture was like building a 24-hour newsstand for only one publication.

Despite the millions invested in database publishing, basic questions remain unanswered: Is there a demand for the product? What are the real costs? How do you set a logical price? "I'm not sure anyone has a good feel for any of this," admits William Dunn, president and publisher of Dow Jones' Information Services. And Dow Jones knows more about the field than most competitors.

To make sense of the confusion, you must first understand the technology. A database is any collection of information, from airline schedules to credit reports. Sales of such data in print form now top $2.1 billion annually, but optimists see even greater potential in putting this information on-line with a computer.

Doing that isn't complicated. If the information is not already available in electronic form, it gets entered into a computer—often by low-paid keypunch operators in Taiwan or Korea. Most information is eventually stored on 16-inch magnetic-coated aluminum disks, each slightly larger than a long-playing phonograph record and holding the equivalent of 1,000 bestsellers. The disks are stacked 30 high inside a drive unit about half the size of a desk. Up to 300 drive units can be connected to a central processor.

Now comes the excitement. The processor can search for data at breakneck speed. To get citations on *The Grapes of Wrath* from 1 million titles, for example, takes just five seconds. "Man is gradually overcoming the limits to obtaining and using knowledge," explains Roger Summit, Dialog's president. "Computerized information retrieval from databases offsets the crushing weight of the information explosion. Now you don't have to read everything."

You do, however, still have to pay for what you read, and since the days of Hearst and Pulitzer, publishing has been grandly profitable. Will the computer create a new generation of electronic press lords?

The new technology already is letting outsiders get a significant portion of the information dollar. The cost of using an on-line service can range from under $10 for a simple inquiry to over $100 for a complex computer run, but look who gets that money. Database owners—companies like Associated Press or Disclosure Inc. — typically get a 15% royalty each time someone uses their material. The

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bulk of the fee, however, goes to the owners of the computers on which the data are stored.

These companies—vendors, in industry parlance—amount to electronic libraries. At the moment, many tend to specialize by subject area. Chase Econometrics, McGraw-Hill's Data Resources and Wharton, for example, are fighting over the market for economic analysis and projections. The Source and CompuServe are competing for the general information market.

Some companies, such as Dow Jones, Dun & Bradstreet and Data Resources operate computer systems that sell their own data. Vertical integration costs big money, but offers big advantages: quality control and valuable market information.

Telecommunications carriers like GTE's Telenet, Tymshare's Tymnet and United Telecom's Uninet also get a piece of the pie. These firms offer low-cost, long-distance telephone service that links customers with database vendors.

Database publishing is so new, almost everyone is flying blind. "There is a trap here," explains Bob Weissman of Dun & Bradstreet. "Companies are offering the technology simply because it's exciting."

Industrywide, revenue distribution looks like this: Of the roughly $1.2 billion a year spent for on-line data, $180 million goes to database owners, $900 million to vendors and $120 million to telecommunications carriers.

But what about profits? Right now many database publishers see things the way Brent Harries, McGraw-Hill's group president of information companies, does. "Once you've got the database, and your production is already done electronically, it costs next to nothing to make that information available on-line."

Impressive. But some accountants might calculate things differently. Many data owners, whose production is already computerized, see the cost of putting material on-line merely as the $1,000 or so it takes to spin off a magnetic tape. They send the tape to a vendor who "loads" it onto his computers, automatically indexing and organizing the data in the process. It may cost another $30,000 annually to keep proprietary files up to date. But after that, owners generally put their calculators away and take their money to the bank.

Unfortunately, there may be other costs to consider. Suppose you put information on-line that would otherwise be sold in print form, and not just an index of your data. The on-line product could cannibalize print sales. To calculate costs correctly, then, you must apportion part of the original information-gathering expense to the on-line product. "When you do that, gross margins shrink from maybe 90% to a more normal 20%," says Andrew Uszak, senior vice president of R.R. Bowker & Co., the Xerox subsidiary that produces such industry standards as *Books in Print* and *Publishers Weekly*.

The effect of this cannibalization is difficult to see. McGraw-Hill's on-line products "have had no impact on print sales," claims President Joseph Dionne. As for *Books in Print*, Uszak says on-line has not hurt print sales either. "But that's today," he explains. "Will we start losing print sales tomorrow? I don't know."

Some database owners do know. "Every time we put our newsletters on-line," says Ken Bosomworth, president of International Resource Development, a market research and publishing firm, "we've lost our shirts. Print customers disappeared."

Pricing is another problem. Computer search time usually costs $1 per minute—discouraging enough to many. Industry optimists, however, expect competition to push charges down. But what happens when production costs are fully allocated?

There are already signs that database users are eager to pinch pennies. Look at the fight over supplying corporate statistics. Many customers find that Disclosure Inc.'s SEC information, at less than $10 per full document plus connect time, is more attractive than McGraw-Hill's more sophisticated Compustat Service, which has initial subscription fees of between $5,000 and $63,700.

Another threat looms from new competitors. Right now much database information isn't proprietary. The raw statistics are often public information. "If someone wanted to send tons of material to Taiwan and have it keypunched, he could build a database very cheaply," says Dunn.

Database pie-in-the-skyers, of course, see vast profits in serving the home and small business markets. After all, there are already 2.5 million microcomputers in the U.S. and 50% more every year. Companies like The Source, CompuServe, Dialog, even Dow Jones, are each approaching consumers in different ways—and the re-

Dialing for data

Using an on-line database is a relatively simple procedure—if you know exactly what you want and where to find it. Looking up AT&T's five-year sales and earnings history, for example, takes only minutes. The information is on several services, including Lockheed's Dialog, Mead Data Central and The Source. Here's how we got it from Dow Jones:

1. We connect our computer terminal to a telephone and make a local call to a packet switching network, in this case Telenet.

2. Telenet answers and asks what equipment we are using, to provide a clearer signal. We punch in the code "A8," signifying Digital Equipment Corp.'s Decwriter III, a so-called dumb terminal.

3. On flashes the symbol "@," Telenet's way of telling us to name a database vendor. We answer with the "address" for the Dow Jones News/Retrieval service in Princeton, N.J.

4. Telenet tells us we are connected with Dow Jones.

5. We are now communicating with an IBM mainframe computer at Dow Jones that asks which of the company's several services we want. We answer: "DJNS," the product that carries corporate financial data.

6. DJ asks for our paid-subscriber password. Since this also tells the computer whom to bill, the word is blanked out by the computer.

```
1  TELENET
   21L 11:M
2  TERMINAL A8
3  @C A09 42

4  609 42 CONNECTED

5  WHAT SERVICE PLEASE????
   DJNS
6  ENTER PASSWORD
   ■■■■■■■■■■■■■■
       DOW JONES NEWS/RETRIEVAL
         COPYRIGHT (C) 1983
       DOW JONES & COMPANY, INC.
         ALL RIGHTS RESERVED.

   ENTER QUERY
     //DSCLO
   DISCLOSURE II
   COPYRIGHT (C) 1983
   DISCLOSURE INC.
   ---------------------------------
8  TO CONTINUE, ENTER COMPANY STOCK
   SYMBOL AND PRESS RETURN
     T
   COMPANY NAME:AMERICAN TELEPHONE & TELEGRAPH CO

9  ENTER    FOR

     1    CORPORATE PROFILE
     2    BALANCE SHEETS FOR 2 YEARS
     3    INCOME STATEMENTS FOR 3 YEARS
     4    QTRLY INC STATEMENTS (CUR FY)
     5    LINE OF BUSINESS DATA
     6    5-YR SUMMARY DATA (REVS, INCOME,
              EPS)
     7    FULL FINANCIAL DATA (2 THRU 6)
     8    OFFICERS AND DIRECTORS
     9    OWNERSHIP AND SUBSIDIARIES
    10    OTHER CORPORATE EVENTS
    11    MANAGEMENT DISCUSSION
    12    CORPORATE RECORD (1 THRU 10)
    13    FULL CORPORATE RECORD (1 THRU 11)
    14    2-YR LIST OF REPORTS ON FILE
              WITH THE SEC
    99    HOW TO ORDER FULL TEXT OF SEC
              REPORTS
     6
10                FIVE  YEAR  SUMMARY
                       SALES        NET INCOME     EPS
     1981   $9,229,000,000    6,888,000,000    8.55
     1980   51,755,000,000    6,058,000,000    8.17
     1979   46,183,000,000    5,655,000,000    8.01
     1978   41,744,000,000    5,262,000,000    7.73
     1977   37,003,000,000    4,466,000,000    6.84
       DISC
11 LOG ON: 10 13  LOG OFF: 10 15  EASTERN TIME
   MARCH 17, 1983 609 42 DISCONNECTED
```

7. DJ's copyright notice appears, and the vendor asks what database we would like to access. We enter "DSCLO," for a specific bank of computers containing SEC reports compiled by Disclosure Inc.

8. After logging on with Disclosure, DJ asks what company we are interested in. "T," we reply, using stock symbol code, and DJ affirms that we want AT&T. DJ's computer is now ready to "read" the proper section of its database disks. (Like a researcher referring to an index, the computer need not search the entire file.)

9. DJ now asks what part of the file we are interested in. It offers 15 choices. We request number six.

10. Instantly the computer reads that section of the database and prints out the information.

11. We disconnect from the database, vendor, Telenet and local phone lines.

Doing all this took two minutes on-line, probably the minimum time for any database request. Our bill came to roughly $8.55. About $4.20 goes to Dow Jones for computer time. Another $4 goes to Disclosure Inc. for the information. Telenet gets 25 cents, and 10 cents goes to New York Telephone for the local call.

If you have followed this example, you probably now appreciate two things about on-line databases: Using them efficiently isn't easy, and it can be expensive.—**J.B.**

sults aren't always encouraging. "People who say they'll get $100 per household per month are wrong," says Dunn. "Maybe $20 to $30 will be generous."

No one really knows how many customers will think it's worth several dollars to get the latest government statistics zapped in the instant they are released, when anything really important will be on the 6 o'clock news for free. "We asked our users if they would like an electronic encyclopedia," says The Source's Roger Miller. "In each survey they said yes, yes, yes. But when you get down to a simple unchanging file, it's a lot cheaper in print. If we can't improve on the traditional method of delivering the information, people won't pay for it."

So what if mass market database publishing is really a long way off? Isn't the demand of rich corporate customers almost insatiable? Maybe not. There is evidence that these users tighten up on database spending once they overcome an initial fascination. Already Tymnet and Telenet report that while the number of phone calls to databases is increasing by nearly 75% annually, the average length of time callers stay on-line has dropped by 25% over the past year.

This is not to say no one will ever do well in on-line database publishing. Dow Jones has a customer base of 60,000—the industry's largest. Most of what it sells is historical data, built around an on-line news service and the *Wall Street Journal* index. To avoid hurting sales of the newspaper, each edition goes into the computer at 6 a.m. but only in condensed form. D&B, also a well-positioned competitor, offers its 143-year-old credit analysis service, the sort of information ideally suited to on-line distribution. But remember: Both Dow Jones and D&B were marketing this material profitably back in the days of movable type and mail distribution.

Another strong contender is Mead Data Central's LEXIS service. It provides legal citations on vendor-installed terminals to several thousand customers. LEXIS now competes successfully against privately owned West Publishing Co., which once dominated this specialized market but was slow to see the potential of on-line delivery. Mead Data, which earned an estimated $7 million last year, is a bright star at its otherwise troubled parent.

For everything that glitters in database publishing, however, there may be a passel of potential failures. What is involved is a war among the media, and the most efficient will win. Yes, ever more information will be accessed and delivered by computers. But no, print won't disappear. Gee-whiz technology is not automatically the clear victor over cheaper, more portable print. With all the risks, being first with the newest on-line publishing system may only mean losing the most money. ■

On January 10, 1983, no champagne was opened at Northwestern Mutual.

On January 10th FORTUNE Magazine published the results of a nationwide survey of nearly 6,000 executives, outside directors and financial analysts, who were asked to rate the reputations of the 10 largest companies in America's 20 largest industries. Northwestern Mutual Life ranked number one overall in the life insurance category and for four attributes, including quality of services and management.

While this news would have popped the corks at many other life insurance companies, at the Northwestern, it was business as usual. You see, Northwestern Mutual Life is accustomed to such accolades. Last November, A.M. Best Co. —*the* performance-rating authority in the life insurance industry, compared the actual dividend performance (not illustrations) over 20 years of the largest life insurance companies in the country. In all four categories that were the basis for comparison, Northwestern Mutual Life ranked number one. Outdistancing such well-known giants as Prudential, Metropolitan Life and John Hancock.

Additionally, based on their analysis of financial position and operating performance, A.M. Best Co. assigned Northwestern Mutual their highest General Policyowners Rating of A+ (Excellent).

But these results shouldn't be surprising to anyone familiar with The Quiet Company. For over 125 years, Northwestern Mutual has been a leader in low-cost, long-term life insurance. A record that is the envy of the industry. And a record that makes other companies realize we're a tough act to follow.

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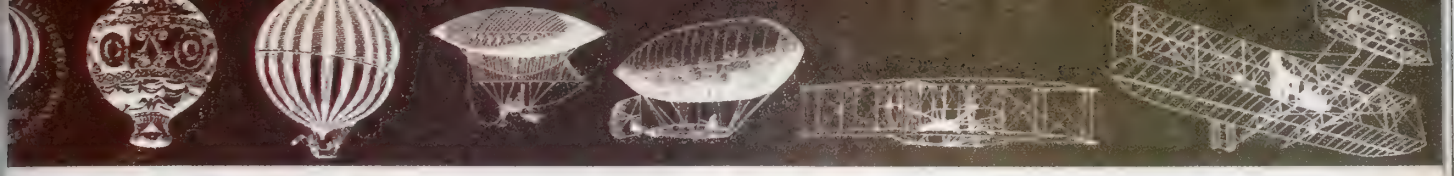

AIR AND SPACE BICENTENIAL

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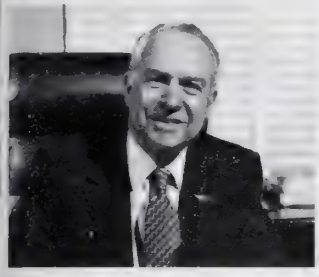

Clifton F. von Kann
Maj. Gen., USA (Ret.)
President, National
Aeronautic Association

Laurent Fabius
Minister of State and
Minister of Research
and Industry

There are national and international reasons to celebrate the 200th anniversary of Man's first departure from the earth's surface.

The United States air and space establishment is the key element of national defense, vital to economic progress and closely wedded to the advancement of high technology.

The Montgolfier brothers initiated unpowered flight in 1783. Another 120 years passed before the Wright brothers proved that Man could fly where he wanted to fly—not only where the winds took him.

In the 80 years that followed, Man's progress in the air and beyond has been the greatest of all the world's wonders. America zoomed from 12 seconds in the air at Kitty Hawk to the landing on the moon in 1969 and the Space Shuttle in 1980.

Our Nation's preeminence in air and space was overwhelming. But we slowed our efforts in military applications, in the pace of aeronautical R&D, in technical education, in our desire to excel.

The Bicentennial of manned flight can arouse our flagging *spirit*, reignite our love for adventure and our pride in technical excellence. It can inspire us to exploit the vast untapped potential of aerospace and to scale new heights.

The Bicentennial is not for America alone. Progress in air and space is a triumph of the entire free world. Much of the American story has been replayed in other free nations, and each has made its unique contributions. Today, in a world of international interdependence, we and our allies together are stronger than any of us can be alone.

Our friends acknowledge the technical and military leadership that America's freedom, good fortune, and ample resources have given to the free world. Even in spirited competition, the defense of the free world is based on United States prowess in military aerospace applications that flow from technical discoveries and inventions accumulated in the amazingly productive decades that began with the Wright brothers.

The Bicentennial belongs to all of us so that the friendly competition of the past may provide greater economic progress and added security for the free world.

For all of us, the future lies in technological leadership and the development of young people who excel in these new, exciting fields.

—Clifton F. von Kann

France has a long and rich scientific and technological tradition. The French have always been inventive and creative. This brilliant past is illustrated today on the occasion of the Bicentennial of Man's first flight.

But, two centuries after the exploits of the pioneers, the event also is an appropriate time to review what is currently going on in our burgeoning air and space industry.

On the civilian scene, France is at the cutting edge of the international market with the Airbus line, the ATR-42 regional transport, helicopters, and the CFM 56 motor. Development is equally active in the military sector.

France has assigned high priority to the air and space industry. In this intermediate phase, particular attention will be given to assuring that, on the one hand, a sufficiently high level of R&D will be devoted to paving the way for the technology equipment that will be called for in the years 1990-2000, and, on the other hand, the more traditional sectors of the economy will benefit from the technology, knowledge, and methods thus developed—so that they, too, can be brought up to date, as they must be.

France is on the threshold of achieving the autonomous role in the space industry that she had set for herself, thanks to the French Ariane launch vehicle and telecommunication, direct TV and earth-observation satellites.

Ariane, after three successful test launches out of four, is now operational. At the close of the Salon du Bourget, Ariane will launch the first operational European telecommunications satellite (ECS). Subsequently, it will make several launches for the international organization Intelsat. In 1984 and 1985 the emphasis will be on the launching of the French data-collection (Telecom 1) and direct-broadcast TV (TDF1) satellites.

The government is carefully preparing for the future above and beyond these current projects. A launch vehicle twice as powerful as Ariane is under study for 1986. This vehicle is expected to dramatically lower the cost-per-kilo of putting a satellite into orbit. R&D for space vehicles for the years 1990-2000 will also be intensified.

For the French government, air and space R&D is of particular concern within the broader R&D programs that have been assigned top priority. Enriched by its past successes and the supply of high-level engineers and technicians, the air and space industry will be, for the foreseeable future, one of the major axes of our technological and industrial development.

But this overall policy would make sense only within the context of the development of the widest possible international cooperation—a development to which we attach particularly great attention. Cooperation, first of all, with our European neighbors: for example, we are currently in the midst of fruitful negotiations concerning shared operation of direct-broadcast TV. But we intend also to offer our cooperation to any nation engaged in air and space activity that will accept partnership with France. We intend always to give preferential treatment—technological, economic, financial, and commercial—to those who can provide France with the most extensive contact with the rest of the world.

—Laurent Fabius

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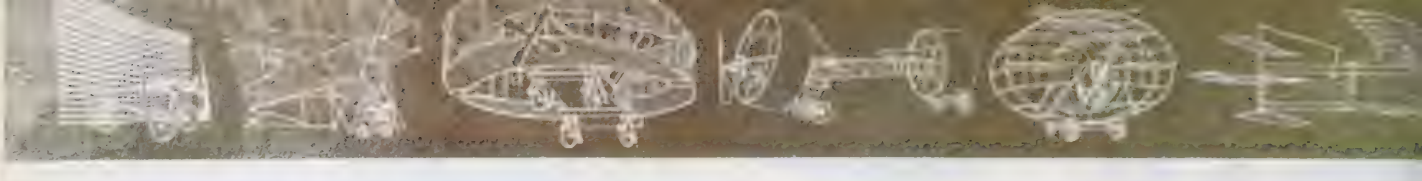


BICENTENAIRE DE L'AIR ET DE L'ESPACE · AIR AND SPACE BICENTENNIAL ·
1783 1983

FROM THE MONTGOLFIER TO THE SATELLITE

On November 21, 1783, just two months after England had been forced to grant its American colonies independence at the Treaty of Paris, Pilâtre de Rozier and the Marquis d'Arlandes accomplished the first human flight when their hot air balloon rose from the Château de La Muette in the French capital and landed at the nearby La Butte aux Cailles. Little more than a week later, Jacques Charles and N. Robert repeated the exploit with a hydrogen filled balloon, which left the Tuileries Gardens and landed outside Paris two hours later.

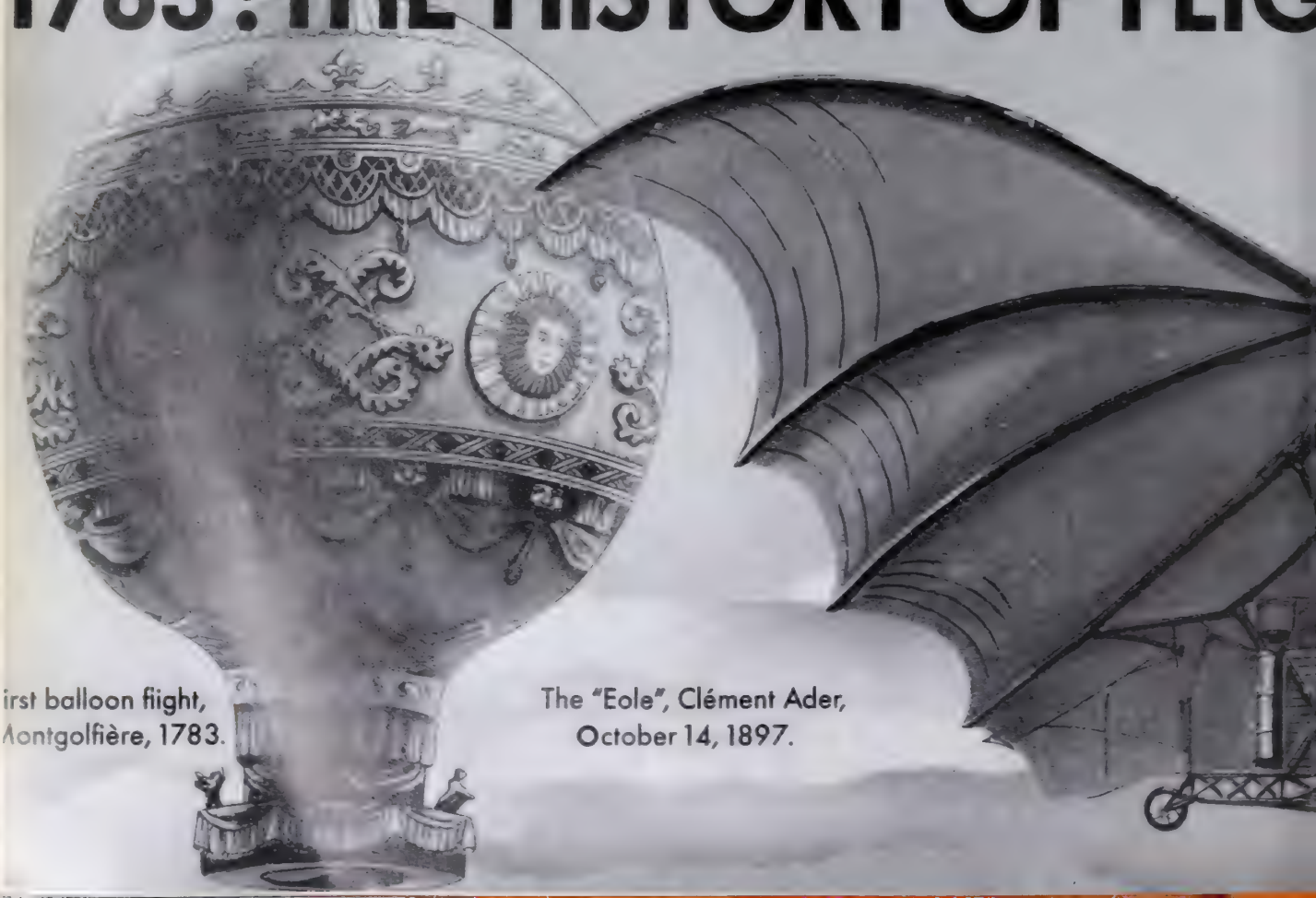
On June 4, at the small village of Annonay in central France, Joseph and Etienne de Montgolfier succeeded in sending up a hot air balloon for the first time. And then, on September 19th, King Louis XVI and the whole court of Versailles watched spellbound as one of Montgolfier's balloons rose up into the sky carrying a sheep, a rooster and a duck. The demonstration had been specially arranged for Benjamin Franklin, the American Ambassador who had negotiated the Treaty of Paris.

These achievements were but the start of a series of exploits that were to give France a dominating role in aviation for more than a century. It was in France that the first aeronautical company was set up back in 1794. Henri Giffard was the first to go up in a steam-driven airship in 1852 and it was from Paris, in 1870, that the first airmail letters were delivered. Although Orville and Wilbur Wright were the first men to make a controlled flight in an airplane, thirteen years earlier Clément Ader had succeeded in flying over 150 feet in a noncontrollable machine. Among Frenchmen to achieve aviation firsts in the years that followed were: Louis Blériot, who was the first to cross the English Channel in 1909, and Henri Fabre—still alive—who made the first seaplane flight in 1910.

The French commemoration of these events is being held under the patronage of the President of the Republic, the Prime Minister and the various ministers concerned as well as a Committee of Honour under the presidency of General Jacques Mitterrand, President of the French Aeronautical Industry Association (G.I.F.A.S.) and chairman of Aerospatiale.

According to Prime Minister, Pierre Mauroy aeronautical adventure has helped to bring the peoples of the

1783 : THE HISTORY OF FLIG



irst balloon flight, Montgolfière, 1783.

The "Eole", Clément Ader, October 14, 1897.

world together. "It was the whole of Paris that went to Le Bourget to welcome Lindbergh, it was all the countries of Latin America who wept over the five-day disappearance of Guillaumet over the Andes. It was the whole world which mourned the disappearance of Mermoz in the South Atlantic. And it was millions of television viewers who watched the first steps of Armstrong and Aldrin on the moon."

During the 20th century, the United States has assumed the leading role in aviation: the Atlantic crossing by Charles Lindbergh in 1927, the first flight faster than sound in 1947, the world speed record of Mach 6.7 achieved by the X-15 in 1967, and a return compliment to those first French balloonists when three Americans, Abruzzo, Anderson and Newman landed in Normandy after crossing the Atlantic with their balloon, Double Eagle II, in 1978.

Summing up the importance of all aspects of business aircraft, Canadair Inc.'s President, James B. Taylor says,

AOPA

Forty-four years ago this month the Aircraft Owners and Pilots Association was formed. The spur to the first successful effort to form a group that could address the interests and needs of what has come to be called general aviation was the vision of Edward J. Noble, then-chairman of the Civil Aeronautics Authority. Noble saw tremendous future growth for civil aviation and was concerned that air carrier interests be regularly represented in a coherent, knowledgeable way.

John L. Baker,
President

AOPA is committed to representing pilots and aircraft owners as a community rather than a babel of specific interests or applications. Its membership has grown to more than 265,000 individuals who use aircraft for everything from recreation to livelihood and includes representatives of industry, labor, the military, and the air carriers.

The work of AOPA includes daily contacts with government, community and user groups, and individuals across the nation and in foreign countries.

AOPA's present leadership sees the same potential for growth that Noble envisioned 44 years ago, and it sees it at all levels.

The future course of aviation—including space—is limited only by the vision, imagination and courage of its leaders.

WAS WRITTEN IN FRANCE.

The French have always been intrigued by flight. And it's this enthusiasm and excitement to fly that has continued for 200 years to make France a leader in aviation and its related fields.

Escadrille La Fayette, the Spad, 1914-17, flown by American pilots in French uniform.

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To note just one example of America's achievement: The Sikorsky Division of United Technologies Corp. is the largest helicopter manufacturer in the world, employing more than 12,000 people—all in the United States—and posting annual sales of more than a billion dollars. Sikorsky is the manufacturer of choice for large, corporate helicopters in America, and the company's name is almost synonymous with the aircraft itself. The company is already designing helicopters for the 21st century as part of an ongoing, multimillion dollar R&D program.

GENERAL AVIATION MANUFACTURERS

General aviation today brings the modern air transportation benefits of aeronautical progress to business and individuals with the added flexibility and freedom lacking in a mass transportation system.

As world business expands and decentralizes in an increasingly complex business world — general aviation is not only the fastest, most efficient travel mode, it is also the economical mode of choice.

Our industry has emerged from the recession with new concepts for business transportation. We've ridden through 1982 on the strength of a new generation of business jets that cruise on supercritical wings and fuel-efficient engines to new heights and operating ranges, topping all airliners but the Concorde to altitudes of 51,000 feet.

Edward W. Stimpson
President

Advancing technology and pilot performance have resulted in a 40 percent improvement in the general aviation safety record since 1972, according to the National Transportation Safety Board.

Transportation is the product we offer, but we include the speed, efficiency, flexibility and freedom to meet a wide range of air transportation needs. Bringing the technological advances of decades to the individual air traveller is the gift of aeronautical progress represented by general aviation.

It's not just in the area of equipment, however, that the Americas hold the leading edge, but in ancillary services as well. For example, Frank B. Hall & Company is a recognized pioneer in the field of aviation and aerospace insurance. The company handled the first commercial flight protection in 1919 and today designs innovative risk management programs for satellite users.

What has now captured the public imagination are the U.S. space efforts —hundreds of U.S. satellites now orbiting the world, a space shuttle ready for commercial service and, of course, the first landing of a man on the moon. As President Ronald Reagan told the American congress, "Since 1783, Man has not just left the ground—he has even left the planet."

In addition to France and the U.S. the Air and Space Bicentenial will be celebrated by Britain, Belgium, West Germany, Japan, Italy, Switzerland, Australia and Canada.

The 35th Paris Air Show will take place at Le Bourget between May 26 and June 5, 1983.

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NOT JUST A COUNTRY OF MONTGOLFIERS

French President Georges Pompidou used to get very angry because Americans persisted in regarding France as the land of wine, perfumes and cheeses when, in fact, it has become a major industrial power. One of the dangers of celebrating the exploits of those early French balloonists and aviators is that people may not realize that France still remains a major force in aeronautics and space. For example, under the aegis of ADERLY (Association pour le Développement Economique de la Région Lyonnaise) the Lyons region has emerged as one of Europe's leading high-technology centers. A thousand years ago, Lyons attracted trade from the far corners of Europe. Today, still a commercial giant, Lyons now boasts of one of the largest technical work forces in Europe.

As French Prime Minister Pierre Mauroy remarked when inaugurating the Bicentennial last November, "France may be the country of Montgolfiers and balloons may glitter in the sky over the Rue Royale, but we have fortunately progressed since then. We have become the world's third most important nation in aeronautics and space.

"There has been Caravelle and Concorde. There is the Airbus and the Mirage 2000. Finally there is Ariane, on which we are pinning great hopes despite certain development problems.

"We are not just commemorating the Bicentennial as a historical event. We should profit from this commemoration to portray France as it really is: a great industrial power."

It was a theme also taken up by General Mitterrand, the brother of President François Mitterrand. The first Air Locomotion Exhibition was held in Paris in 1908 and seventy-five years later the tradition is being maintained with the opening of the 35th air show at Le Bourget. At this event, the French aeronautics and space industry will once again show that it is firmly facing the future, the General said.

The French certainly have good grounds for feeling that they have more than maintained the traditions laid down by the pioneers. In 1981, the French aeronautical and space industry registered sales of 43.8 billion francs, of which 27.1 billion was for export. Estimates for last year suggest that sales reached 50 billion francs, with exports of around 30 billion.

TODAY: WRITING COST-EFFICIENC

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ATR 42

NATIONAL BUSINESS AIRCRAFT ASSOCIATION

The first flight and the first reported business flight were both made by lighter-than-air aircraft.

Manned flight began in 1783 when Pilâtre de Rozier and the Marquis d'Arlandes "piloted" a balloon over the fields of France. The first business aircraft flight is attributed to the dirigible "Gelatine", owned by Charles B. Knox, in Portland, Oregon, in 1905, less than 18 months after the first Wright brothers flight in Kitty Hawk.

John H. Winant
President

Business aviation grew as aviation enthusiasm became more widespread. Today there are more than 66,000 business aircraft in the United States and thousands more operate in other countries.

Business aircraft have come a long way in style and performance. New concepts in engineering and materials—More efficient airfoils, lighter and stronger materials and new, sophisticated configurations—have their origins and debuts on business aircraft.

Companies do not hesitate to invest, within their financial capability, in new machine tools, test facilities, production techniques, data and, information handling and other items that help them achieve greater productivity. A company invests in an airplane for the same reason: it makes economic sense.

With more than 21 billion francs in annual sales, 13 factories in France, 39,000 employees and four major divisions — Aircraft; Helicopter; Tactical Missile; and Ballistic and Space Systems — Aerospatiale is one of the world's largest aerospace groups, and the largest in Europe. Aerospatiale manufactures a wide range of civil and military equipment: the Airbus, Transall and Corvette aircraft; the Ecureuil, Dauphin and Super-Puma helicopters; the Exocet antiship missile; and the Ariane launch rocket.

The Aircraft division alone employs 13,900 people in four factories with a total area of 707,000 square meters.

The Airbus, pride of the Aircraft division, can be seen all over the world. More than 500 have been ordered by 46 companies. The division is also currently developing the ATR-42, an aircraft which benefits from the latest and most advanced research in the field and which has already earned 42 firm orders and 11 options from 11 companies. The division also produces

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GERARD SOUHAM INTERNATIONAL.

Highlights of the Bicentennial celebrations in France and the U.S. are noted below. Pan American World Airways has a long and proud tradition of trans-Atlantic service to France and now offers regular flights throughout the U.S.

FRENCH CALENDAR OF EVENTS:

May 26—June 5	Le Bourget—35th Paris Air Show.
June 1—June 12	Annonay—Reenactment of the 1st flight of the Montgolfier brothers' hot-air balloon.
June 10—June 12	Balleroy—FORBES Magazine's 8th Annual Hot-Air and Gas Balloon Meeting.
June 26	Paris—International Gordon Bennett Cup, Place de la Concorde.
July 4—August 28	Paris—Exhibition, "The Dream World from the Montgolfier to the Satellite," Grand Palais.
August 26—September 27	Nantes—6th World Championship of Hot-Air Balloons.
September 9—11	Vaux-le-Vicomte—2nd Ibis Montgolfiade (hot-air balloon rally).
October 1—10	Arc-et-Senans—5th World Championship of Gas Balloons.
November 11	Paris—Commemoration of 1st Manned Flight at La Muette.
December 1	Paris—Commemoration of 1st Manned Flight in Gas Balloon, Les Tuileries.

AMERICAN CALENDAR OF EVENTS:

June 9	"Stars" Exhibit, National Air and Space Museum, Washington, D.C.
June 12	St. Louis/Parks College Air Expo
June 23—27	Festival of American Folklife, Smithsonian Institution, Washington, D.C.
July 2—5	North American Challenge Cup for Hot Air Balloons, Battle Creek, Mich.
July 9	"The Fantastic Festival of Flight," National Air and Space Museum, Washington, D.C.
July 16—25	Johnson Space Center Exhibit
July 23—24	Dayton International Air Show, Ohio
August 30—September 6	EAA Fly-In, Oshkosh, Wisc.
September 11—14	Aviation Art Forum, U. of Va., Charlottesville
September 10—18	International Air Races, Reno, Nevada
October 15—16	Jackson County Air Show, Pascagoula, Miss.
October 21—23	Dulles Bicentennial Air Expo
November 21	Commemorative Exhibit and Multi-Media Show, National Air and Space Museum, Washington, D.C.
December 12—13	Thunderbird Balloon Race, Glendale, Ariz.
December 16	80th Anniversary of Wright brothers Flight, National Air and Space Museum, Washington, D.C.
December 21	Wright Trophy Annual Dinner, Washington, D.C.

For additional information on events please write or call: Air and Space Bicentennial, 1575 Eye Street, N.W., Washington, D.C. 20005 (202) 289-5392.

TODAY: ALL FIELDS OF HELICOPTE

aerospatiale

TwinSt

Dauphin 2

the new Transall C160 — now in service with the French and Indonesian armies — the Epsilon, flying school planes and a variety of private aircraft.

Aerospatiale, the world's leading exporter of rotary-wing aircraft, has sold more than 6,500 helicopters to 96 countries since its inception in 1956. The Helicopter division today offers a complete range of models from the lightest to the heaviest.

The Super-Puma, one of the most recent, incorporates the latest technological advances and is designed to meet end-user requirements for the next two decades. More powerful than the Puma, its predecessor, the Super-Puma is fast (290 kilometers per hour), reliable and comfortable. Depending on the model, the Super-Puma can carry 9 to 24 passengers and a 3.9 ton payload. It has a 910 kilometer range.

The Dauphin, an entirely new design, is the most spacious (10-to-14 passenger capacity) and fastest (270 kilometers per hour) in its class.

Aerospatiale's Tactical Missile division, a pioneer in wire-guided antitank missiles since the end of World War II, has continued to develop and improve a wide range of products suitable for all kinds of modern warfare: antitank warfare; air defense; indirect support; antiship warfare; and even tactical nuclear weapons.

With more than 50 nations as customers, Aerospatiale is the world's most important manufacturer of tactical missiles. Among the most recent are the sea-to-sea Exocet missile, used by 18 navies including the main European powers, and the AS15 all-weather light antiship search-and-attack weapon fitted for the Dauphin-2 helicopter.

Aerospatiale has brought all of its know-how and industrial capacities to bear upon the field of space and satellite communications.

Aerospatiale participated in the creation of Arianespace, which manufactures and markets the Ariane launch rocket. It has contracted with the 22 Arab League members to supply three communications satellites. Aerospatiale is also a member of the Eurosatellite Group, which is responsible for a direct-broadcast television satellite program: TDF1 for France, TV-SAT for West Germany and Télé-X for Sweden. Télé-X will provide preoperational service for Sweden, Norway and Finland. It has a three-channel, high-power signal in the 12 GHz band for direct television broadcasts and two data transmission channels.

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SE.

S MORE

The first complete range of helicopters for private, civil to military use

Super Puma

aerospatiale

37, bd de Montmorency
75781 Paris Cedex 16 - France

SIC GERARD SOUHAM INTERNATIONAL.

EXOCET MM.40 being launched at sea.

Aerospatiale can deliver complete satellite systems on a turnkey basis, providing both the satellite, itself, and the ground stations.

Product improvement and competitiveness are of great importance to Aerospatiale. All of the company's products are subjected to grueling market competition. If Aerospatiale has been successful with its products on tough, wide-open markets, it's largely because of the quality of product designs based on advanced technologies that have been thoroughly investigated and exploited. That is why Aerospatiale devotes more than 20 percent of its 21 billion franc annual volume to research and development.

The next biggest group is Dassault Breguet, with sales of 12.4 billion francs. The company is best known for the Mirage fighters, which performed so successfully in the Six Day War. After bringing out the Mirage F-1 and the Mirage 111, Dassault is now offering the Mirage 2000. An even more sophisticated version, the Mirage 4000, is awaiting development. Dassault also manufactures the Alpha jet in cooperation with West Germany and the Jaguar with Britain. It also produces

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1783 1983

the Falcon executive jet.

France's main engine producer, ABSO, SNECMA, with sales of 4.35 billion francs in 1981, manufactures the Atar engines for the Mirage and collaborates with General Electric in producing the CF-6 used on the Airbus and the Boeing 747 and the CFM-56 for use on the Boeing 707 and the DC-8. Smaller engine manufacturers include Turbomeca, and Microturbo.

Although France made a relatively late arrival in the space field—it was only in 1965 that it became the fifth country to launch a satellite (the A-1 launched by Diamant)—it has since played a leading role in the Ariane, Europe's challenge to the U.S. monopoly in launch rockets. Centre Nationale d'Etudes Spatiales (CNES), the French equivalent of NASA, is responsible for this European Space Agency project in which French interests hold a 59 percent stake. Aerospatiale has the leading role in Ariane, but Matra, the electronics group, and the rocket motor specialist, SEP, are also heavily

Helicopter Association International

The helicopter industry, generally, was slow to feel the worldwide economic slump because of the inherent strength of the commercial helicopter market, a natural result of the helicopter's utility and versatility.

The recent growth in the civil helicopter industry has been phenomenal. The civil helicopter fleet in North America alone grew at an annual rate of 16 percent during the last decade, from 3,500 helicopters in 1970 to more than

Frank L. Jensen, Jr., Executive Director

9,000 today; the total world commercial fleet is estimated at 14,000.

Since the HAI began in 1948, it has grown with the industry, constantly evaluating member needs and acting to serve members and the industry within available resources.

HAI's role in today's helicopter world is significant—not as a separate entity functioning autonomously, but as the collective voice of the civil helicopter industry.

As one example, HAI has just published the most comprehensive single source of information on the commercial helicopter industry, *The 1983 Helicopter Annual.*

With more than 1,000 member companies from 36 countries, HAI has both the right and the responsibility to work actively and conscientiously, toward and speak out for the advancement of the entire industry.

THE IRRESISTIBLE FRENCH HIGH TECH APPEAL.

In the past three years an impressive list of renowned international companies have fallen for Lyon's charms. She's attracted advanced research centers and production plants created by winners like Schering Plough Inc., Hewlett Packard and Unilever.

What is Lyon's appeal?

Lyon lies in beautiful countryside, less than three hours from Paris and the Mediterranean, and less than two from Geneva and the Alps. And Lyon herself is a vibrant, ancient center of culture. Managers here appreciate the important link between employee productivity and quality of life...

Lyon has raced to the front lines as a european High Technology Center. She boasts a community of industries, researchers and universities embracing a wide range of fields : chemistry and pharmaceuticals, electronics, engineering and nuclear energy.

Today, a commercial giant still, she's attracted a large and growing technical workforce.

So convenient : road and air links in all directions. So important : no wonder the world's fastest business train first went to Lyon.

The past. The future. Lyon, she's got it all.

For further informations please contact.

LYON

ADERLY. Association pour le Développement Economique de la Région Lyonnaise

20, rue de la Bourse, 69289 Lyon Cedex 1 - FRANCE
Tél. 00.33 (7) 838.10.10. Télex 310828 Cecomex Lyon

The memory of the Bicentennial

Victor the official computer of the air and space Bicentennial and Europe's leading 16 bit micro-computer will record all throughout the Bicentennial. Races. Elapsed Times. Winners. Victor's memory will be the permanent record of these great events. Victor wishes good flying to all participants. We are proud to be part of the continuing marriage between computer, aviation and space.

VICTOR

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Victor Technologies Inc.
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Scotts Valley, CA 95 066
(408) 438.66.80

Victor Technologies Europe
Ninoofsesteenweg 71
1750 Schepdaal
Belgique
(2) 569.55.00

involved.

Strongly placed in the field of electronics for military applications, Thomson CSF, Matra and Aerospatiale have gained considerable experience in the field of satellites and satellite communications.

The new government's obvious determination to maintain a strong presence in aeronautics and space was shown by its decision to take majority stakes in Dassault, Matra and Thomson CSF, thereby consolidating the state's hold over the industry, where it already controls Aerospatiale, SNECMA and rocket fuel manufacturer SNPE.

As General Mitterrand remarked at the inauguration of the Bicentennial, "The French aeronautical industry, both civil and military, is confident about the future. It is preparing future programs that will enable it to take advantage of economic recovery when it comes."

Recognizing the importance of international cooperation to achieve these ends, DATAR, the French government body in charge of regional planning and industrial development has established in the U.S. the French Industrial Development Agency. In order to promote regional development, the French government has given DATAR the mission of encouraging foreign investments, particularly those that will increase industrial activity in priority areas, contribute to a better trade balance or bring advanced technology and processes to France.

BICENTENAIRE DE L'AIR ET DE L'ESPACE · AIR AND SPACE BICENTENNIAL · 1783 1983

Many of the companies represented in this supplement will provide **additional information** about their products and services upon request. Use the reader service card opposite **page 352** to request further information.

Except for the signed messages, the text for this supplement was prepared with the cooperation of Interel, a Paris-based International Public Affairs Agency.

Canadair is proud to announce the realization of its competitors' greatest fears. Introducing the Challenger 601.

The new, GE-powered Challenger 601 received its official airworthiness certification from the F.A.A. on March 11, 1983, after exceeding all announced performance specs.

Simply stated, the new 601 will fly you more economically and in greater wide-body comfort than any other intercontinental corporate jet in the world.

To a range of over 3,500 nautical miles with NBAA/IFR reserves.

And while such a feat has only recently become technologically feasible, you might say it was historically inevitable.

The Challenger, after all, was conceived, designed and built from scratch in the late nineteen-seventies.

Its competitors, the Gulfstream III and the Falcon 50, for example, seem more like predecessors—based on prototypes originally designed in the late fifties and early sixties.

So, technology moves forward: The Challenger 601 offers a 37% to 42% lower rate of fuel consumption per mile than the Gulfstream III, and even a 6% to 13% lower rate of fuel consumption per mile than the far smaller Falcon 50.

Yet, the Challenger also offers an abundance of the one thing every corporate jet in history has found it necessary to skimp on.

Width.

Measured at the floor line, the Challenger 601 is roughly 30% wider than the Gulfstream III, and 48% wider than the Falcon 50.

As for range, the intercontinental Challenger 601 will fly you over 3,500 nautical miles with full NBAA/IFR reserves still in the tanks.

Making it one of the very few corporate jets in existence that can cross the Pacific Ocean with one stop.

Or fly from New York to the Middle East with one stop.

Or from New York to Paris non-stop.

Or from London to New York non-stop.

Or from Washington to Stockholm non-stop.

Or from Toronto to Frankfurt non-stop.

To find out more about the historically imperative Challenger 601, the man to speak to is Mr. James B. Taylor, President of Canadair Inc.

His telephone number is (203) 226-1581.

Or you can write him at Canadair Inc., 274 Riverside Avenue, Westport, CT 06880.

canadair challenger

The most popular twin turbine corporate helicopter today, and the most productive. The S-76 MARK II.

It carries more passengers farther and faster than any other corporate twin. It is the smoothest and quietest. It has the largest cabin, seating eight in greater comfort with more head and leg room.

The S-76 MARK II meets the highest civil standards in the world: Air Transport, Category A. With complete backups for all major aircraft systems. It is backed by more than 200,000 flight hours of experience, a worldwide product support network, and the industry's finest warranty.

As a unit of United Technologies, Sikorsky will continue to deliver what customers want, when they want it. Improved engines, composite rotors and blades, a de-ice system, innovative cockpit designs, and more comfortable and quieter interiors.

For more information, contact Mackie D. Mott, Vice President-Corporate Marketing, Sikorsky Aircraft, Stratford, CT 06601, (203) 386-7600.

Sikorsky. The Leader.

The Forbes 500s

Sales flat, profits down steeply, inventories building up—it was the trough of the wave, the bottom of the barrel. But all the while, the market was signaling the recovery to come.

IN ALL BUT ONE of the four ways in which The Forbes 500s measure U.S. business performance, 1982 was the trough of a mighty breaker, the low point in a decade of stress and some serious declines. But the fourth measure, as it turned out, was the most important of all.

Here are the changes in the 1982 figures for sales, profits, assets and market value:

	1982	1981	1980
Sales	−0.8%	+9.9%	+15.0%
Profits	−9.1	+4.4	+7.7
Assets	+9.2	+10.7	+11.6
Market value	+16.7	−11.5	+31.6

The totals at the end of 1982

Sales:	$2,389,473,000,000
Profits:	$ 112,547,000,000
Assets:	$3,829,297,000,000
Market value:	$1,072,164,000,000

The bright spot, of course, was market value. Buoyed by a bull market, The Forbes Market Value 500 gained $154 billion in 1982 and finished the year above the $1 trillion mark for the first time since 1980, signaling the recovery now under way.

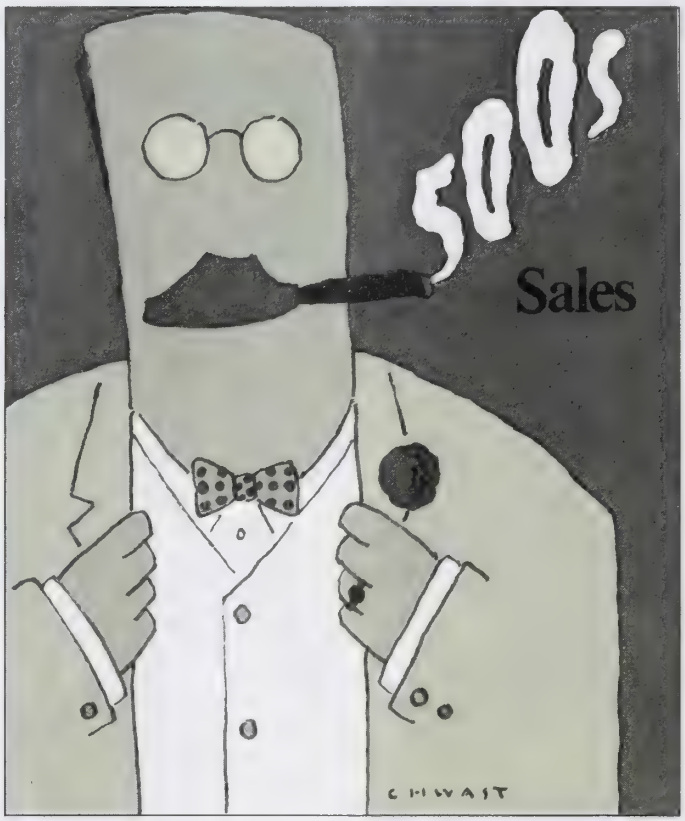
In the tables that follow, FORBES ranks the top 500 companies in each of the four categories. Turn to the alphabetized summaries beginning on page 266 for the overall report card on each company that made any of the four lists.

What did it take to make it? The lowest-ranking company on the Sales 500 had $1.1 billion in revenues. It took $45.7 million to make the profits list, $1.75 billion for assets and $558 million in market value.

Historical footnote: It's the end of an era for the perennial champion of the 500s, American Telephone & Telegraph, first-ranked in assets and profits this year, second in sales and market value. With the Bell breakup, AT&T will no longer dominate number one and two. But Ma Bell and her children will be just as pervasive and even more visible: All seven of the regional telephone companies created by the breakup will show up as new 500s members.

The Forbes Sales 500

Maybe the only thing worse than illusory sales increases—produced by inflation rather than by real growth—is not having the illusion.



THE 500 COMPANIES listed on the following pages accounted for just under $2.4 trillion in sales last year, equal to about 78% of the U.S. gross national product. For the second straight year, every company on the Sales 500 list had at least $1 billion in sales. Quite a few billion-dollar companies didn't even make the list, including such familiar names as Joy Manufacturing, Square D and Timken.

Rank 1982	Rank 1981	Company	Sales ($000,000)	% change over 1981
1	1	Exxon	97,173	−10.1
2	4	American Tel & Tel	65,093	11.8
3	3	General Motors	60,026	−4.3
4	2	Mobil	59,946	−7.1
5	5	Texaco	46,986	−18.5

In fact, $1 billion in sales is less and less the critical measure of megasize; 109 companies on the list, or more than 1 in 5, had more than $5 billion in sales in 1982, 42 had more than $10 billion; and the top 4—Exxon, American Telephone & Telegraph, General Motors and Mobil—had more than $50 billion each. Together, those four giants accounted for over a quarter of a trillion dollars. Now, that's megasize.

Impressive numbers. What happened to these huge companies in 1982, the year inflation was broken on the Federal Reserve rack, was less impressive than it was sobering.

Roughly half the companies on the list showed sales decreases from 1981, and most of the sizable increases came through acquisition. Moreover, the total of all 500 was flat from 1981—down, in fact, by about $20 billion. The reason: Inflation, which (statistically, at any rate) was responsible for all of 1981's 8% increase in the total, fell sharply in 1982. And in contrast to the 305 companies last year whose sales growth matched or bettered the 8.9% CPI rate, only 236 on this year's list kept up with even 1982's 3.9%. Maybe the only thing worse than the illusory effects of inflation is for the illusion to disappear.

Last year every company in the Sales 500's top ten showed a sales increase. This year only four did—AT&T, IBM, Du Pont (whose 45.8% increase largely reflected the mid-1981 acquisition of Conoco) and Sears, Roebuck, the steadily improving old-line retailer, which is gradually moving into financial services. Not one of the top ten's oil company members showed an increase, nor did General Motors and Ford.

Joy, Square D, Timken and others got pushed off the list by 36 new companies. Biggest of them: the new Norfolk Southern Corp., now the country's 189th-largest corporation and its 4th-largest railroad.

WHEN YOU HAVE TEN YEARS TO BUILD A NEW CAR, YOUR MISTAKES END UP IN THE WASTEBASKET. NOT IN SOMEBODY'S GARAGE.

When many companies design a new car, the pressures to get that car out into the marketplace are often so intense, the car gets churned out overnight.

And all too frequently, car buyers pay the price. They can end up with cars that are totally unimaginative, or poorly thought out, or inadequately tested.

In designing the new Volvo 760 GLE, one thing we gave ourselves plenty of was time. Ten long years. Time to challenge accepted notions about building automobiles. Time to try off-the-wall ideas. Time to make mistakes, then correct them. And above all, time to test, test, test.

What emerged from this process is a car that's remarkable indeed.

The Volvo 760 GLE is more aerodynamic than a Porsche 928, yet holds five adults. It has traveled through a high-speed slalom course faster than a Jaguar or Audi.

It has a climate control system so advanced, it can change the interior air five times a minute.

Prototypes of the 760 GLE were test driven a total of two million torturous miles. This testing led to hundreds of design improvements. And after we'd made the improvements, we tested again. And improved on the improvements.

So when the new Volvo 760 GLE is sitting in your garage, you'll own one of the most patiently-built cars in history.

And as everyone knows, patience has its rewards.

THE VOLVO 760 GLE

The closest thing yet to a perfect car.

The Forbes Sales 500

Rank 1982	Rank 1981	Company	Sales ($000,000)	% change over 1981
6	7	Ford Motor	37,067	–3.1
7	9	IBM	34,364	18.2
8	6	Standard Oil Calif	34,362	–22.3
9	16	E I du Pont	33,223	45.8
10	12	Sears, Roebuck	30,020	10.2
11	10	Gulf Oil	28,427	0.6
12	8	Standard Oil Ind	28,073	–6.3
13	14	Phibro-Salomon	26,703	6.4
14	13	General Electric	26,500	–2.7
15	11	Atlantic Richfield	26,462	–4.8
16	15	Intl Tel & Tel	21,922	–5.5
17	17	Shell Oil	20,062	–7.3
18	26	United States Steel	18,375	31.8
19	25	Occidental Petroleum	18,212	23.8
20	18	Citicorp	17,814	–2.5
21	19	Safeway Stores	17,633	6.3
22	20	K mart	16,772	0.0
23	21	Phillips Petroleum	15,698	–1.7
24	24	Sun Company	15,519	3.4
25	22	Tenneco	14,979	–3.1
26	23	BankAmerica	14,955	–0.9
27	28	Aetna Life & Cas	14,164	4.7
28	27	United Technologies	13,577	–0.7
29	29	Standard Oil Ohio	13,152	–2.3
30	30	Getty Oil	12,762	–6.3
31	35	GTE	12,066	9.4
32	33	Procter & Gamble	11,994	5.1
33	34	Kroger	11,902	5.6
34	36	CIGNA	11,787	8.7
35	32	J C Penney	11,414	–3.8
36	43	Travelers	11,381	16.1
37	45	R J Reynolds Inds	10,906	11.7
38	40	Eastman Kodak	10,815	4.6
39	31	Dow Chemical	10,618	–10.6
40	38	Union Oil California	10,390	–3.3
41	39	Chase Manhattan	10,171	–4.5
42	37	Chrysler	10,045	–7.2
43	41	Dart & Kraft	9,974	–2.3
44	47	Westinghouse Elec	9,745	4.0
45	51	RCA	9,338	3.8
46	56	Philip Morris	9,102	9.6
47	42	Union Carbide	9,062	–10.9
48	44	Boeing	9,035	–7.7
49	52	Beatrice Foods	9,024	2.9
50	48	Ashland Oil	8,865	–4.3
51	50	Goodyear	8,689	–5.1
52	53	Xerox	8,456	–2.7
53	75	General Foods	8,351	26.5
54	46	Amerada Hess	8,343	–11.2
55	65	American Express	8,093	12.2
56	66	Lucky Stores	7,973	10.7
57	63	Household Intl	7,768	6.7
58	68	Federated Dept Stores	7,699	8.9
59	59	Mfrs Hanover	7,640	2.2
60	67	American Stores	7,508	5.8
61	71	PepsiCo	7,499	6.7
62	70	Rockwell Intl	7,395	5.1
63	86	Fedl Natl Mortgage	7,384	26.0
64	83	Fluor	7,336	20.8
65	60	McDonnell Douglas	7,331	–0.7
66	55	Halliburton	7,282	–13.7
67	74	J P Morgan	6,885	1.6
68	82	Pacific Gas & Elec	6,785	9.5
69	81	Winn-Dixie Stores	6,764	9.1
70	90	Southland	6,757	18.7
71	77	Minn Mining & Mfg	6,601	1.4
72	49	Caterpillar Tractor	6,469	–29.3
73	61	Gulf & Western Inds	6,423	–13.0
74	73	Monsanto	6,325	–9.0
75	57	Armco	6,279	–18.8
76	85	Coca-Cola	6,250	6.1
77	78	Allied Corp	6,167	–3.8
78	110	General Dynamics	6,155	21.5
79	76	W R Grace	6,128	–6.0
80	116	Charter	6,065	–3.8
81	93	Consolidated Foods	6,039	7.6
82	80	Continental Illinois	5,900	–6.2
83	87	Nabisco Brands	5,871	0.9
84	79	Union Pacific	5,818	–8.7
85	84	Coastal Corp	5,799	–1.9
86	88	City Investing	5,771	–0.4
87	100	Johnson & Johnson	5,761	6.7
88	113	Dayton-Hudson	5,661	14.5
89	125	Texas Eastern	5,654	24.9
90	106	Lockheed	5,613	8.4
91	109	Jewel Cos	5,572	9.1
92	97	Sperry	5,571	2.7
93	89	Continental Group	5,564	–4.0
94	95	Utd Energy Resources	5,562	2.2
95	91	Chemical New York	5,515	–2.5
96	92	Raytheon	5,513	–2.2
97	101	Honeywell	5,490	2.6
98	98	Georgia-Pacific	5,402	–0.2
99	108	UAL	5,320	3.5
100	118	General Mills	5,312	9.5
101	62	Bethlehem Steel	5,260	–27.9
102	121	Super Valu Stores	5,197	12.4
103	102	TRW	5,132	–2.9
104	64	F W Woolworth	5,124	–29.1
105	103	Trans World	5,108	–3.0
106	127	Columbia Gas System	5,071	14.6
107	117	Consolidated Edison	5,067	4.1
108	150	Merrill Lynch	5,026	24.5
109	99	Signal Cos	5,022	–7.1
110	107	Greyhound	4,994	–2.9
111	114	Litton Industries	4,942	0.0
112	137	Southern Company	4,927	15.8
113	96	CSX	4,909	–9.6
114	104	Colgate-Palmolive	4,888	–7.1
115	105	Ralston Purina	4,803	–8.1
116	58	LTV	4,777	
117	120	Bankers Trust NY	4,677	
118	112	Alcoa	4,648	
119	94	Deere	4,608	
120	72	Great Atl & Pac Tea	4,608	
121	136	First Interstate Bancp	4,608	
122	146	American Home Prod	4,582	
123	155	Anheuser-Busch Cos	4,577	
124	124	American Brands	4,563	
125	145	Foremost-McKesson	4,493	
126	139	Security Pacific	4,491	
127	130	Loews	4,481	
128	135	First Chicago	4,402	
129	154	El Paso	4,364	
130	187	Pacific Lighting	4,359	
131	140	Texas Instruments	4,327	
132	144	Transamerica	4,326	
133	149	So Calif Edison	4,303	
134	69	Intl Harvester	4,292	
135	143	Control Data	4,292	
136	167	Hewlett-Packard	4,254	
137	115	Burlington Northern	4,198	
138	126	Weyerhaeuser	4,186	
139	142	American Elec Power	4,180	
140	147	AMR	4,177	
141	122	Dresser Industries	4,166	
142	163	InterNorth	4,159	
143	161	Commonwlth Edison	4,130	
144	129	Borden	4,111	
145	193	Burroughs	4,095	
146	133	CPC International	4,091	
147	119	American Can	4,063	
148	151	CBS	4,052	
149	134	Teledyne	4,040	
150	111	International Paper	4,015	
151	202	Warner Commun	3,990	
152	148	United Brands	3,973	
153	173	Albertson's	3,940	
154	123	National Steel	3,903	
155	204	Digital Equipment	3,881	
156	174	Pub Svc Elec & Gas	3,874	
157	170	Transco Energy	3,869	
158	132	Firestone	3,869	
159	141	IC Industries	3,862	
160	212	Houston Industries	3,838	
161	186	ENSERCH	3,788	
162	191	Motorola	3,786	
163	156	Kerr-McGee	3,777	
164	162	Eastern Air Lines	3,769	
165	152	Champion Intl	3,737	
166	158	Pan Am World Airways	3,716	
167	165	Archer Danls Midland	3,713	
168	168	H J Heinz	3,689	
169	180	Fleming Cos	3,688	
170	179	May Dept Stores	3,670	

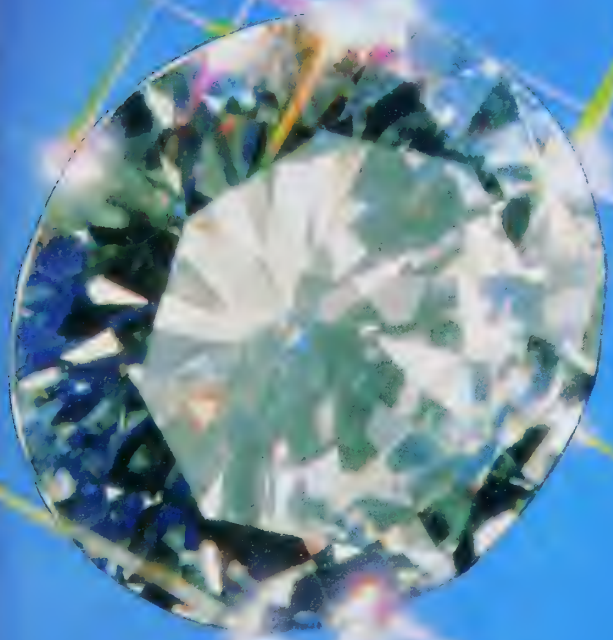
How many pieces of software can you use on the IBM Personal Computer? 1,000 and up.

The Forbes Sales 500

Rank 1982	Rank 1981	Company	Sales ($000,000)	% change over 1981
171	169	Delta Air Lines	3,618	2.4
172	171	Bristol-Myers	3,600	3.0
173	261	Baldwin-United	3,598	44.4
174	153	Owens-Illinois	3,591	–9.7
175	157	Combustion Eng	3,570	–6.3
176	196	Time Inc	3,564	8.1
177	207	American Intl Group	3,563	12.9
178	197	Martin Marietta	3,527	7.1
179	176	NCR	3,526	2.7
180	175	Continental Corp	3,506	1.1
181	178	Emerson Electric	3,502	2.1
182	185	FMC	3,499	3.9
183	177	Tosco	3,466	1.0
184	164	American Cyanamid	3,454	–5.4
185	201	Pfizer	3,454	6.3
186	199	Panhandle Eastern	3,391	3.8
187	195	Pillsbury	3,385	2.5
188	188	Carnation	3,382	0.8
189	■	Norfolk Southern	3,359	–6.5
190	259	Wal-Mart Stores	3,348	34.1
191	233	MidCon	3,337	18.8
192	217	Lincoln National	3,337	11.1
193	189	PPG Industries	3,322	–1.0
194	214	Esmark	3,303	7.4
195	194	Wells Fargo	3,290	–0.5
196	240	Melville	3,262	18.1
197	239	Allied Stores	3,249	17.7
198	218	Supermarkets General	3,247	8.3
199	181	Warner-Lambert	3,246	–4.0
200	242	Texas Utilities	3,238	18.2
201	243	Consol Natural Gas	3,211	17.3
202	238	Borg-Warner	3,195	15.7
203	241	Associated Dry Goods	3,189	15.9
204	222	Houston Natural Gas	3,181	9.4
205	183	Diamond Shamrock	3,177	–5.9
206	216	North Amer Philips	3,168	4.6
207	190	Penn Central	3,165	–5.5
208	184	Santa Fe Industries	3,160	–6.2
209	198	Southern Pacific	3,104	–5.2
210	224	Am Natural Resources	3,097	6.9
211	220	Merck	3,063	4.6
212	160	Celanese	3,062	–18.4
213	226	Carter Hawley Hale	3,055	6.4
214	205	B F Goodrich	3,005	–5.6
215	252	Avon Products	3,001	14.8
216	172	Reynolds Metals	2,981	–14.4
217	249	R H Macy	2,979	12.1
218	310	Hospital Corp of Am	2,977	44.3
219	322	SmithKline Beckman	2,969	49.5
220	227	Amer Hospital Supply	2,968	3.4
221	236	Eli Lilly	2,963	6.8
222	209	Norton Simon	2,953	–6.1
223	208	Crown Zellerbach	2,947	–6.4
224	225	Kimberly-Clark	2,946	2.1
225	235	Campbell Soup	2,945	5.3
226	213	Florida Power & Lt	2,941	–4.8
227	192	Textron	2,936	–11.8
228	272	American General	2,913	22.0
229	211	Boise Cascade	2,912	–6.3
230	203	Kaiser Alum & Chem	2,912	–9.7
231	237	Middle South Utils	2,902	4.7
232	250	Crocker National	2,894	9.0
233	254	American Motors	2,878	11.2
234	251	Texas Gas	2,878	8.6
235	200	Burlington Inds	2,876	–11.9
236	257	Alco Standard	2,852	13.1
237	336	Allegheny Intl	2,839	48.8
238	159	Inland Steel	2,808	–25.2
239	221	ARA Services	2,806	–3.8
240	182	Ingersoll-Rand	2,775	–17.9
241	219	Bank of Boston	2,745	–6.9
242	131	Republic Steel	2,738	–37.5
243	244	Consumers Power	2,731	–0.1
244	263	McDonald's	2,715	9.6
245	253	Quaker Oats	2,712	4.3
246	255	SONAT	2,681	4.4
247	223	Mead	2,667	–8.1
248	230	Kidde	2,655	–6.8
249	268	Phila Electric	2,645	8.7
250	270	Amer Broadcasting	2,641	9.1
251	138	Wickes Cos	2,638	–31.2
252	266	Murphy Oil	2,602	6.4
253	275	Abbott Laboratories	2,602	11.1
254	229	Levi Strauss	2,572	–9.8
255	248	Interco	2,567	–4.0
256	232	St Regis Paper	2,556	–9.3
257	320	Marriott	2,541	27.0
258	303	Baker International	2,535	18.5
259	231	Singer	2,523	–11.0
260	285	Swift Independent	2,488	8.1
261	321	Northrop	2,473	24.2
262	245	Hercules	2,469	–9.2
263	280	Avco	2,459	5.7
264	206	Eaton	2,453	–22.5
265	215	Tesoro Petroleum	2,440	–19.6
266	246	Dana	2,423	–10.6
267	291	Pittston	2,421	8.6
268	288	United Telecom	2,419	7.3
269	308	InterFirst	2,416	16.7
270	234	AMAX	2,416	–13.7
271	262	Marine Midland Bks	2,412	–2.9
272	309	General Public Utils	2,406	16.5
273	228	Cooper Industries	2,394	–16.5
274	300	Niagara Mohawk Pwr	2,394	11.3
275	313	Central & South West	2,389	16.2
276	273	Owens-Corning Fbrgls	2,373	–0.1
277	283	Kellogg	2,367	2.0
278	311	Morrison-Knudsen	2,361	14.7
279	299	Va Electric & Power	2,361	9.2
280	289	Mellon National	2,355	4.8
281	274	Revlon	2,351	
282	298	Stop & Shop Cos	2,342	
283	210	Northwest Industries	2,307	–
284	276	USF&G	2,306	
285	284	Scott Paper	2,293	
286	271	Irving Bank	2,277	
287	267	Whirlpool	2,271	
288	247	Pennzoil	2,269	–
289	269	McGraw-Edison	2,260	
290	335	Duke Power	2,244	
291	258	American Petrofina	2,242	–
292	277	Gillette	2,239	
293	329	Turner Construction	2,236	
294	279	Wilson Foods	2,233	
295	265	NL Industries	2,214	–
296	301	Amfac	2,209	
297	282	Ogden	2,202	
298	304	Times Mirror	2,200	
299	344	Zayre	2,195	
300	302	Malone & Hyde	2,193	
301	306	NICOR	2,166	
302	327	St Paul Cos	2,159	
303	264	American Standard	2,125	–
304	314	Detroit Edison	2,123	
305	337	Northwest Bancorp	2,081	
306	354	Jack Eckerd	2,080	
307	330	Ryder System	2,076	
308	286	IU International	2,070	
309	295	Genl Tire & Rubber	2,062	
310	312	Superior Oil	2,041	
311	281	Beneficial Corp	2,040	–
312	357	Walgreen	2,039	
313	362	Tandy	2,033	
314	292	Engelhard	2,019	
315	383	H F Ahmanson	2,015	
316	334	Grumman	2,003	
317	294	MAPCO	1,993	
318	297	White Consolidated	1,990	
319	307	Kemper	1,985	
320	340	Petrolane	1,978	
321	287	Uniroyal	1,969	–
322	350	First Bank System	1,961	
323	397	Wetterau	1,957	
324	379	Genuine Parts	1,937	
325	355	RepublicBank	1,934	
326	305	Jim Walter	1,925	
327	278	Valero Energy	1,901	–
328	375	Texas Oil & Gas	1,879	
329	341	Northwest Airlines	1,878	
330	331	SCM	1,855	
331	296	Fruehauf	1,852	–
332	364	Giant Food	1,852	
333	389	Sherwin-Williams	1,852	
334	353	Ethyl	1,846	
335	338	Upjohn	1,836	

■ Not on 500 list in 1981

Oklahoma Shining Bright



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The Forbes Sales 500

ank 1981	Company	Sales ($000,000)	% change over 1981
339	Rohm & Haas	1,828	–3.0
343	Castle & Cooke	1,823	–1.2
319	Olin	1,823	–8.9
346	Schering-Plough	1,818	0.5
378	Continental Telecom	1,818	14.3
316	J P Stevens	1,814	–10.7
380	Texas Commerce Bshs	1,798	13.6
348	Sterling Drug	1,796	0.2
402	Crown Central Petrol	1,772	19.2
293	Manville	1,772	–18.9
369	Northeast Utilities	1,763	6.5
326	Central Soya	1,753	–11.2
374	Allegheny Power	1,752	9.0
384	No Indiana Pub Svc	1,733	11.3
381	First City Bancorp	1,729	9.4
385	Harris Corp	1,719	10.8
423	Sysco	1,713	23.6
356	Emhart	1,710	–2.1
453	First Executive	1,707	35.7
425	ConAgra	1,705	23.8
325	Williams Cos	1,691	–14.4
332	Anderson, Clayton	1,681	–12.9
366	Whittaker	1,674	0.1
396	Baxter Travenol Labs	1,671	11.1
394	Squibb	1,661	9.0
342	Gould	1,651	–10.9
363	Primark	1,639	–2.9
500	Raymond Intl	1,638	50.0
368	Long Island Lighting	1,634	–1.9
393	Chesebrough-Pond's	1,623	6.1
361	General Signal	1,622	–4.7
359	Stauffer Chemical	1,618	–6.3
388	Natomas	1,617	5.2
365	Foster Wheeler	1,615	–3.5
315	Allis-Chalmers	1,610	–21.2
421	Northwest Energy	1,602	14.5
407	E F Hutton Group	1,596	10.6
352	Hughes Tool	1,596	–9.3
416	Baltimore Gas & Elec	1,595	12.3
437	Public Service Colo	1,590	19.0
318	A E Staley Mfg	1,588	–20.8
372	Cabot	1,588	–2.2
405	MCA	1,588	19.5
328	Cummins Engine	1,587	–19.1
317	Koppers	1,585	–21.5
■	Best Products	1,582	42.6
376	Corning Glass Works	1,579	–1.2
382	Air Prods & Chems	1,569	–0.1
404	Hershey Foods	1,566	7.9
447	No States Power	1,561	21.9
323	Intl Minerals & Chem	1,560	–21.4
442	Revco D S	1,555	18.6
441	Peoples Energy	1,542	17.2
390	National Can	1,542	0.5
432	Carolina Pwr & Lt	1,538	14.5

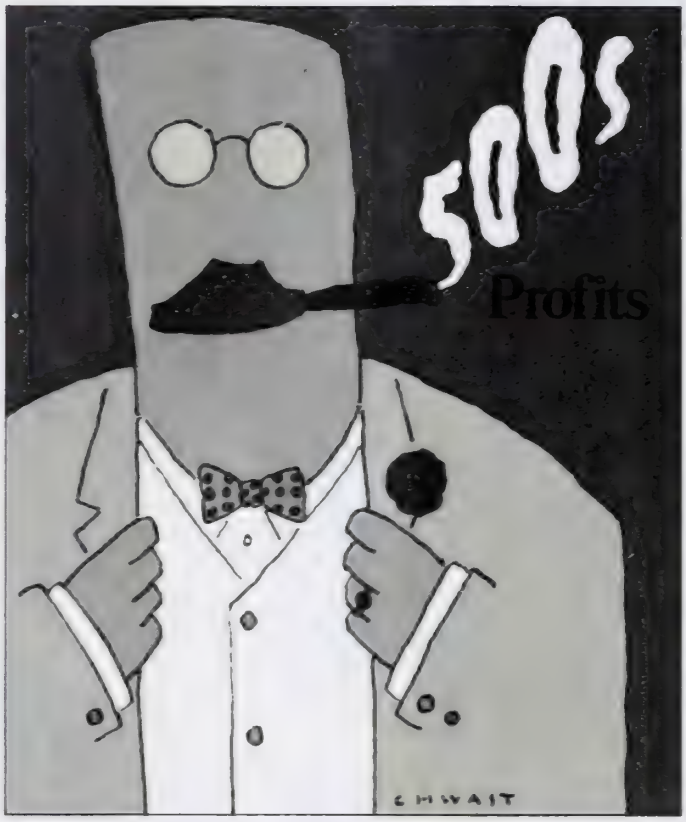
Rank 1982	1981	Company	Sales ($000,000)	% change over 1981
391	406	Republic Airlines	1,531	5.7
392	367	Union Camp	1,526	–8.4
393	398	Bank of New York	1,523	1.9
394	430	Gannett	1,520	11.1
395	■	Texas Air	1,516	110.8
396	433	Humana	1,516	12.9
397	290	Colt Industries	1,512	–32.6
398	419	Chubb	1,509	7.1
399	360	National Distillers	1,499	–12.0
400	415	General Re	1,498	5.2
401	427	Waldbaum	1,491	8.4
402	409	Safeco	1,488	3.7
403	392	Lear Siegler	1,488	–2.8
404	422	Farm House Foods	1,464	5.3
405	473	Entex	1,463	23.3
406	439	Dun & Bradstreet	1,462	9.8
407	418	Pitney Bowes	1,455	2.9
408	386	Westvaco	1,450	–6.5
409	371	Tiger International	1,446	–11.0
410	477	San Diego Gas & Elec	1,431	23.4
411	399	Gt Northern Nekoosa	1,430	–4.3
412	448	Ohio Edison	1,430	11.7
413	452	Mercantile Stores	1,428	12.5
414	410	George A Hormel	1,427	–0.5
415	351	Holiday Inns	1,425	–19.3
416	324	Amstar	1,422	–28.2
417	424	NBD Bancorp	1,406	1.9
418	445	Pacific Pwr & Lt	1,406	9.1
419	457	R R Donnelley & Sons	1,404	12.9
420	414	Seafirst	1,398	–1.9
421	435	Brown Group	1,397	4.4
422	420	Hammermill Paper	1,396	–0.3
423	■	First Boston	1,395	64.8
424	476	Gt Western Financial	1,387	18.2
425	429	Crown Cork & Seal	1,352	–1.6
426	391	ASARCO	1,351	–11.8
427	428	Alleghany	1,350	–1.8
428	484	Mattel	1,342	18.3
429	467	Flickinger	1,337	11.7
430	458	Knight-Ridder News	1,328	7.3
431	479	Eastern Gas & Fuel	1,326	14.5
432	401	United States Gypsum	1,325	–11.2
433	464	Gulf States Utils	1,307	7.0
434	■	PNC Financial	1,307	3.8
435	443	Witco Chemical	1,305	1.0
436	480	Wisconsin Elec Pwr	1,303	13.1
437	475	Arkla	1,297	10.0
438	■	Rite Aid	1,295	21.4
439	417	Polaroid	1,294	–8.9
440	412	Blue Bell	1,292	–9.5
441	■	Capital Holding	1,286	28.2
442	426	Armstrong World Inds	1,286	–6.6
443	492	USAir Group	1,273	14.6
444	490	Fischbach	1,271	13.6
445	438	Norton	1,264	–5.3

Rank 1982	1981	Company	Sales ($000,000)	% change over 1981
446	■	Cincinnati G & E	1,261	16.6
447	■	Bally Manufacturing	1,254	44.8
448	■	United States Shoe	1,254	15.3
449	■	Universal Leaf	1,253	20.5
450	488	Johnson Controls	1,252	10.9
451	■	Republic New York	1,249	17.0
452	459	AMP	1,243	0.7
453	450	Zenith Radio	1,239	–2.8
454	403	Evans Products	1,238	–15.9
455	456	Colonial Penn Group	1,236	–1.5
456	■	Pacific Resources	1,235	14.3
457	358	PACCAR	1,230	–29.1
458	485	Penn Power & Light	1,220	7.6
459	496	Union Electric	1,218	10.1
460	474	Parsons	1,214	2.5
461	449	Florida Progress	1,214	–5.1
462	446	New England Electric	1,213	–5.4
463	■	CBI Industries	1,210	31.6
464	483	Consol Freightways	1,204	5.3
465	460	First Natl Supermkts	1,201	–2.4
466	■	Gulf United	1,198	14.9
467	■	Tektronix	1,196	12.6
468	■	Service Merchandise	1,195	16.4
469	493	McGraw-Hill	1,194	7.5
470	455	Louisiana Land	1,182	–5.8
471	■	Natl Medical Entrprs	1,167	30.8
472	411	Black & Decker	1,160	–18.9
473	■	Wang Laboratories	1,159	35.4
474	■	Dorchester Gas	1,159	62.8
475	■	Centel	1,156	13.3
476	■	SCOA Industries	1,155	9.2
477	■	Amer Medical Intl	1,155	26.4
478	395	Dravo	1,152	–23.8
479	497	Federal Co	1,150	4.5
480	495	Parker-Hannifin	1,148	3.8
481	■	Intl Multifoods	1,148	5.5
482	■	Cameron Iron Works	1,147	23.5
483	486	Roadway Services	1,147	1.5
484	499	Pneumo	1,145	4.7
485	■	Mercantile Texas	1,142	37.2
486	■	Super Food Services	1,129	8.8
487	373	Crane	1,126	–30.1
488	■	Thrifty Corp	1,126	6.8
489	■	Longs Drug Stores	1,123	11.7
490	■	Oneok	1,119	3.1
491	463	Pioneer	1,119	–8.7
492	■	Nash Finch	1,118	4.4
493	■	Richardson-Vicks	1,116	2.5
494	■	Becton, Dickinson	1,114	4.5
495	440	Avnet	1,112	–15.5
496	465	West Point-Pepperell	1,111	–9.1
497	■	Cleveland Elec Illum	1,109	9.4
498	■	Illinois Power	1,107	14.8
499	494	Natl Semiconductor	1,104	–0.5
500	■	Paine Webber	1,100	7.1

ot on 500 list in 1981

The Forbes Profits 500

If sales flattened out, profits went through the wringer. Two out of five companies had down earnings last year, and the biggest sometimes fared the worst.



WHAT GOES UP must come down. While IBM was rolling up a 33% increase in profits last year, oil companies large and small were discovering, along with OPEC, that the palmy days were over for a while.

Take a look at the top ten companies on the list beginning on this page. Seven are oil companies, and only Atlantic Richfield among them escaped a down year in 1982. As the price of oil drifted down in the world oil glut, Exxon's earnings fell 24.8%; Mobil's, 43.3%; Standard of California's, 42.2%; Texaco's, 44.6%.

The oil companies were not alone in going through the profits wringer. The 500 biggest profit generators in U.S. industry accounted for a grand total of $112.5 billion last year—a decrease of 9%, $11 billion less than the $123.8 billion of 1981. More specifically, two out of five companies on the list showed earnings decreases last year. A score of others, while they showed a nominal increase, failed to keep up with last year's moderate 3.9% inflation, as measured by the CPI.

Cash flow was another matter. Total cash flow of the 500 companies increased from $246.6 billion in 1981 to $248.5 billion in 1982. That's a scant improvement, less than $2 billion to spread around, but it was the second straight year in which cash flow increases exceeded earnings growth, reversing the trend of earlier years.

Rank 1982	Rank 1981	Company	Net profits ($000,000)	% change over 1981	Cash flow ($000,000)
1	1	American Tel & Tel	6,992.0	1.5	20,846
2	3	IBM	4,409.0	33.3	9,698
3	2	Exxon	4,185.9	–24.8	10,156
4	7	Standard Oil Ohio	1,879.0	–3.5	2,973
5	8	Standard Oil Ind	1,826.0	–5.0	3,915
6	11	General Electric	1,817.0	10.0	2,934
7	10	Atlantic Richfield	1,676.1	0.3	3,844
8	9	Shell Oil	1,605.0	–5.7	3,490
9	4	Mobil	1,380.0	–43.3	3,547
10	5	Standard Oil Calif	1,377.0	–42.2	2,730
11	6	Texaco	1,281.0	–44.6	2,691
12	12	Eastman Kodak	1,162.0	–6.2	1,945
13	75	General Motors	962.7	188.8	5,589
14	13	Gulf Oil	900.0	–26.9	2,979
15	14	E I du Pont	894.0	–17.3	3,387
16	22	R J Reynolds Inds	870.0	13.3	1,535
17	24	GTE	835.6	15.7	2,643
18	32	Sears, Roebuck	829.7	40.1	2,114
19	20	Tenneco	819.0	0.8	2,241
20	34	Pacific Gas & Elec	810.2	43.5	1,241

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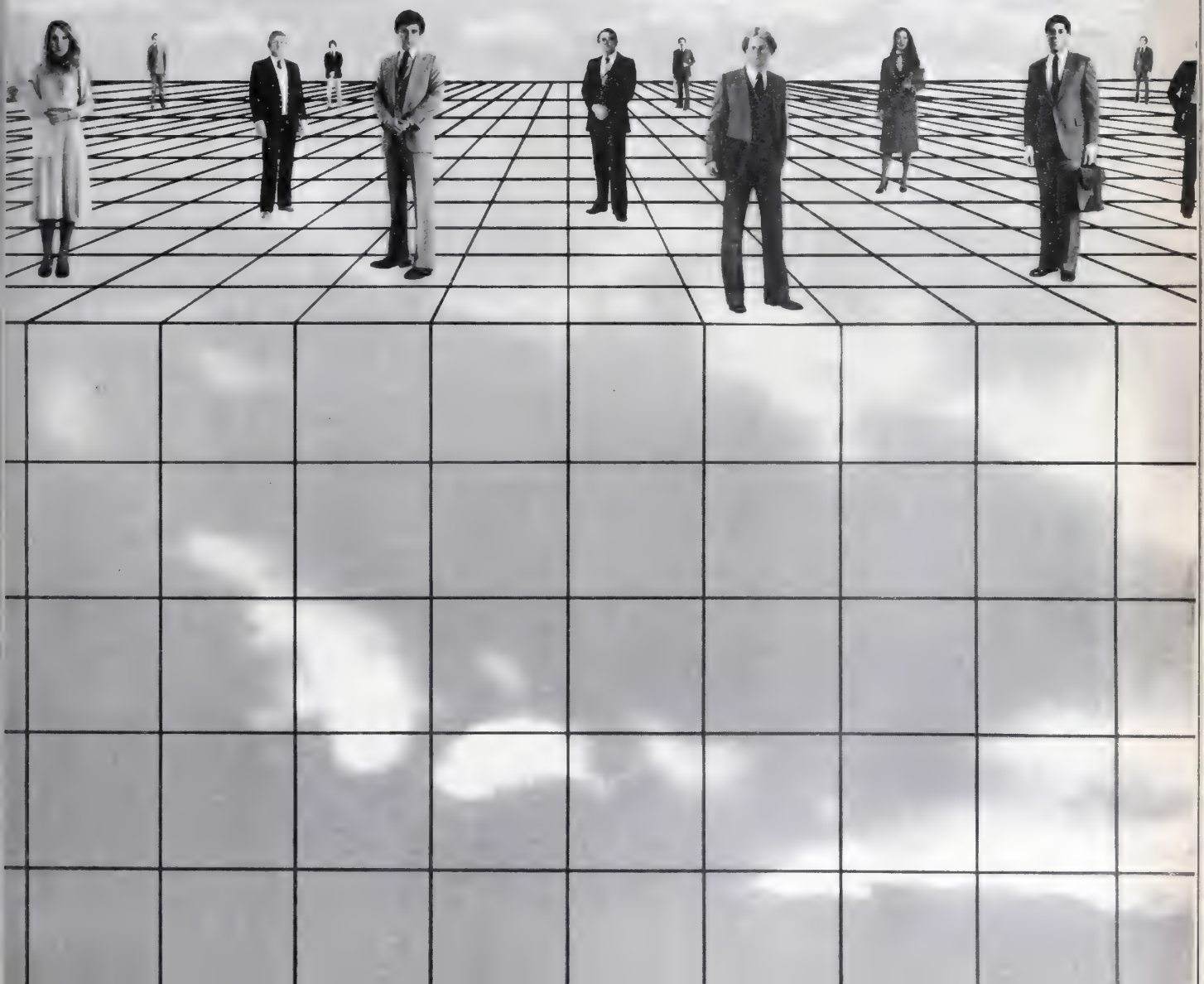

The Forbes Profits 500

Rank 1982	Rank 1981	Company	Net profits ($000,000)	% change over 1981	Cash flow ($000,000)	Cash flow rank 1982
21	21	Union Oil California	804.0	1.6	1,987	21
22	25	Philip Morris	781.8	15.6	1,181	32
23	28	Procter & Gamble	777.0	16.3	1,127	34
24	36	Citicorp	723.0	36.2	1,386	29
25	19	Getty Oil	688.7	–19.3	2,020	20
26	29	Intl Tel & Tel	685.1	5.1	2,432	17
27	18	Phillips Petroleum	646.0	–26.5	1,919	24
28	27	Minn Mining & Mfg	631.0	–6.3	1,003	39
29	47	Commonwlth Edison	606.7	34.9	877	44
30	38	American Express	581.0	12.2	1,912	25
31	39	American Home Prod	560.1	12.6	674	61
32	41	So Calif Edison	555.8	13.4	638	69
33	16	Sun Company	537.0	–50.1	1,954	22
34	44	Johnson & Johnson	523.4	11.9	768	53
35	40	Aetna Life & Cas	521.9	6.3	1,150	33
36	42	Coca-Cola	512.2	6.3	790	50
37	26	Halliburton	496.8	–26.3	973	40
38	48	Consolidated Edison	492.6	9.9	820	46
39	17	CIGNA	490.1	–49.1	1,718	26
40	76	Southern Company	449.3	37.8	1,273	30
41	52	Westinghouse Elec	449.3	2.6	747	54
42	61	SmithKline Beckman	445.2	20.3	568	86
43	67	Texas Utilities	428.6	19.3	680	60
44	45	United Technologies	426.9	–6.7	790	49
45	31	Xerox	423.7	–29.2	1,538	27
46	72	Digital Equipment	417.2	21.5	571	85
47	57	Merck	415.1	4.2	623	71
48	71	American Intl Group	412.7	19.5	742	55
49	60	Eli Lilly	411.8	10.0	531	96
50	■	Norfolk Southern	411.4	–17.8	779	52
51	69	J P Morgan	394.2	13.4	542	92
52	58	J C Penney	391.7	1.3	664	63
53	49	BankAmerica	389.6	–12.5	1,127	35
54	81	Hewlett-Packard	383.0	22.8	640	67
55	59	American Brands	381.1	–1.3	446	126
56	84	Beatrice Foods	358.3	17.8	602	76
57	70	Dart & Kraft	350.3	0.8	685	59
58	73	Duke Power	349.9	4.1	657	64
59	83	Bristol-Myers	348.7	14.0	430	132
60	99	Pub Svc Elec & Gas	342.8	29.8	839	45
61	35	Dow Chemical	342.0	–39.4	1,067	38
62	63	CSX	338.4	–8.0	596	77
63	90	Phibro-Salomon	337.0	16.5	439	129
64	93	Phila Electric	336.2	21.1	522	106
65	62	American Elec Power	335.0	–9.0	804	47
66	129	Pfizer	332.8	50.4	462	118
67	86	Rockwell Intl	331.6	13.6	530	99
68	50	Monsanto	329.0	–26.1	880	43
69	55	Union Pacific	326.8	–20.5	788	51
70	64	W R Grace	319.5	–11.6	603	75
71	77	Raytheon	318.8	–1.6	512	109
72	82	Litton Industries	315.0	1.1	577	82
73	96	Nabisco Brands	314.7	18.2	446	125
74	92	Middle South Utils	310.6	10.3	141	367
75	66	Travelers	309.9	–13.8	3,059	10
76	30	Union Carbide	309.7	–52.3	714	58
77	110	Long Island Lighting	309.4	24.9	232	249
78	478	Metromedia	309.2	417.9	354	170
79	154	Merrill Lynch	308.8	52.2	428	134
80	54	Chase Manhattan	307.5	–25.4	520	107

Rank 1982	Rank 1981	Company	Net profits ($000,000)	% change over 1981	Cash flow ($000,000)
81	97	McDonald's	300.6	13.5	528
82	94	Emerson Electric	300.1	9.8	402
83	107	Mfrs Hanover	294.9	17.0	529
84	43	Boeing	292.0	–38.3	736
85	51	Teledyne	289.6	–34.5	357
86	111	Abbott Laboratories	289.1	16.9	410
87	136	Anheuser-Busch Cos	287.3	32.1	531
88	95	Burlington Northern	283.8	4.3	367
89	109	Consumers Power	280.5	13.2	395
90	122	Penn Power & Light	278.9	20.4	146
91	117	Va Electric & Power	278.6	17.2	613
92	68	Allied Corp	272.0	–21.8	535
93	103	Honeywell	271.3	5.9	579
94	131	Niagara Mohawk Pwr	268.5	21.7	377
95	127	Florida Power & Lt	266.7	19.0	653
96	116	Houston Natural Gas	262.7	10.1	439
97	133	K mart	261.8	18.9	577
98	446	SEDCO	260.0	291.6	360
99	151	Central & South West	259.2	26.8	474
100	125	Warner Commun	257.8	13.8	352
101	120	Detroit Edison	254.7	8.7	463
102	126	Baker International	248.6	10.5	420
103	112	Goodyear	247.6	1.5	527
104	163	Texas Oil & Gas	247.1	28.7	551
105	149	Chemical New York	240.6	17.3	425
106	146	NCR	234.4	12.6	530
107	147	Security Pacific	234.3	13.5	522
108	205	Public Service Ind	233.2	53.8	291
109	102	Federated Dept Stores	232.8	–10.0	457
110	135	CPC International	231.6	6.1	304
111	156	Arizona Public Serv	231.0	17.0	308
112	216	Amer Hospital Supply	229.5	56.5	285
113	148	Kellogg	227.8	10.9	311
114	152	Carolina Pwr & Lt	227.1	11.6	369
115	159	General Mills	225.5	14.7	367
116	74	PepsiCo	224.3	–32.7	610
117	183	Tandy	224.1	32.1	261
118	65	Superior Oil	223.4	–38.2	942
119	165	Bankers Trust NY	223.1	18.7	375
120	■	RCA	222.6	312.2	881
121	80	Sperry	221.8	–29.1	323
122	118	First Interstate Bancp	221.2	–6.3	448
123	98	Loews	221.0	–16.4	628
124	101	Panhandle Eastern	219.9	–16.0	513
125	171	McDonnell Douglas	214.7	21.5	382
126	143	Kerr-McGee	209.8	–0.7	583
127	200	Cleveland Elec Illum	209.0	34.2	292
128	■	Lockheed	207.3	D–P	304
129	215	InterFirst	206.8	41.0	322
130	178	Dayton-Hudson	206.7	19.2	343
131	170	General Re	206.6	16.4	322
132	199	Union Electric	205.5	30.8	181
133	177	SONAT	204.6	17.8	464
134	196	St Paul Cos	204.2	28.1	396
135	184	American General	202.7	20.0	1,099
136	100	United Telecom	201.6	–23.0	639
137	104	General Foods	200.2	–21.6	537
138	150	Kimberly-Clark	197.4	–3.6	294
139	189	Pacific Pwr & Lt	197.3	17.8	441
140	145	Colgate-Palmolive	196.9	–5.5	262

■ Not on 500 list in 1981. D–P: deficit to profit.

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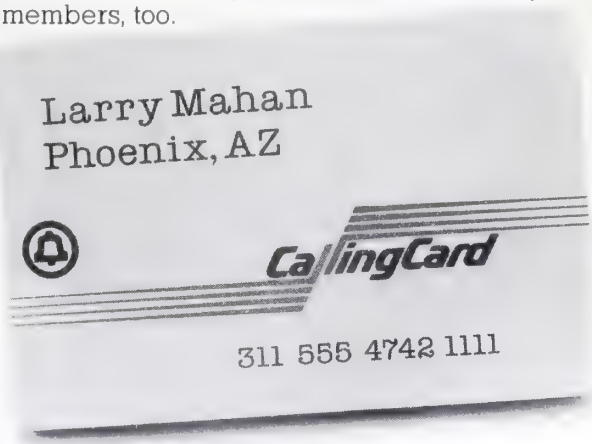

Bell System

The Forbes Profits 500

Rank 1982	Rank 1981	Company	Net profits ($000,000)	% change over 1981	Cash flow ($000,000)	Cash flow rank 1982
141	134	Avon Products	196.6	–10.6	304	197
142	124	TRW	196.3	–14.2	268	220
143	168	Ohio Edison	195.6	6.9	322	183
144	190	H J Heinz	192.8	15.1	253	230
145	445	Brunswick	192.3	188.1	265	222
146	181	Carnation	190.6	10.6	237	244
147	79	NL Industries	188.8	–40.3	452	121
148	128	Pennzoil	188.7	–14.9	548	89
149	207	Baxter Travenol Labs	186.9	24.1	278	214
150	53	Northwest Industries	184.6	–56.0	377	158
151	160	Columbia Gas System	184.5	–5.6	488	111
152	168	Schering-Plough	183.5	2.3	244	239
153	360	Ashland Oil	180.9	100.9	409	141
154	130	Transamerica	180.8	–18.1	651	66
155	179	Gannett	180.5	4.6	270	219
156	115	Continental Group	180.4	–24.8	451	122
157	114	Santa Fe Industries	180.2	–25.6	523	104
158	138	Utd Energy Resources	178.6	–17.2	399	146
159	362	MCA	176.2	96.2	316	189
160	■	Warner-Lambert	175.0	1,797.3	244	238
161	210	Baltimore Gas & Elec	174.8	16.8	360	168
162	78	Dresser Industries	172.3	–45.6	352	172
163	285	Hospital Corp of Am	171.9	54.7	388	150
164	227	Texas Commerce Bshs	170.0	23.6	254	229
165	174	Motorola	169.5	–3.2	430	133
166	140	Amerada Hess	168.7	–20.7	667	62
167	87	Gulf & Western Inds	168.6	–42.1	69	488
168	182	Borg-Warner	167.4	–2.7	278	215
169	206	Gulf States Utils	166.0	10.0	246	235
170	195	Borden	165.9	3.7	266	221
171	132	Texas Eastern	161.3	–26.9	509	110
172	226	Am Natural Resources	161.1	16.7	432	131
173	37	International Paper	160.8	–69.4	351	173
174	239	Allegheny Power	160.7	21.3	319	187
175	218	Amer Broadcasting	160.0	9.4	245	237
176	203	Consol Natural Gas	159.8	5.3	382	154
177	278	Safeway Stores	159.7	39.4	406	142
178	213	Combustion Eng	158.1	7.3	283	210
179	193	Murphy Oil	157.8	–3.2	547	90
180	246	No States Power	157.7	23.6	413	138
181	158	ENSERCH	157.4	–20.1	401	145
182	289	San Diego Gas & Elec	157.3	42.8	196	285
183	223	Consolidated Foods	156.7	11.7	334	178
184	247	Illinois Power	156.4	22.7	186	303
185	23	Occidental Petroleum	155.6	–78.5	723	57
186	142	PPG Industries	155.1	–26.6	383	152
187	173	Archer Danls Midland	155.0	–11.9	282	211
188	284	Squibb	153.6	38.0	183	313
189	191	Control Data	153.3	–8.0	542	91
190	212	Time Inc	153.1	2.9	300	199
191	198	Fluor	152.8	–4.1	377	156
192	290	Cameron Iron Works	152.6	38.7	207	273
193	225	FMC	152.4	9.2	320	186
194	343	Northeast Utilities	151.2	59.0	362	166
195	221	Continental Telecom	150.5	4.6	482	113
196	281	Portland Genl Elec	150.2	33.7	233	248
197	242	Campbell Soup	149.6	15.3	302	198
198	260	Diamond Shamrock	149.5	23.3	447	124
199	105	Hughes Tool	147.6	–42.2	298	200
200	302	N Y State Elec & Gas	145.1	34.6	185	304
201	300	Texas Instruments	144.0	32.7	483	11
202	263	RepublicBank	143.8	19.8	225	25
203	245	Kroger	143.8	12.3	291	20
204	231	Melville	142.1	4.4	227	25
205	259	Dun & Bradstreet	142.1	17.0	179	32
206	249	May Dept Stores	141.7	12.2	249	25
207	308	G D Searle	140.4	33.8	183	30
208	119	Weyerhaeuser	140.0	–40.3	573	[illegible]
209	208	Times Mirror	139.9	–7.0	256	22
210	251	Whirlpool	139.0	10.7	233	24
211	255	Wells Fargo	138.6	11.8	276	2
212	202	Intl Minerals & Chem	137.4	–10.7	279	2
213	224	Transco Energy	137.0	–2.3	525	1
214	267	First Chicago	136.8	15.2	296	2
215	■	Morton Thiokol	136.5	157.6	284	2
216	266	Pillsbury	136.3	14.0	248	2
217	265	R H Macy	135.6	13.3	196	2
218	91	Cooper Industries	135.1	–52.5	208	2
219	253	Gillette	135.1	8.7	240	2
220	113	InterNorth	135.1	–44.5	459	1
221	272	Mellon National	134.4	16.3	209	2
222	279	Utah Power & Light	133.4	17.7	227	2
223	254	General Dynamics	132.8	7.0	385	1
224	299	MidCon	132.6	22.0	377	1
225	157	American Cyanamid	132.1	–33.0	308	1
226	241	Sterling Drug	132.0	1.3	176	3
227	306	Wisconsin Elec Pwr	131.6	24.8	260	2
228	186	Penn Central	131.5	–22.1	341	1
229	316	Cincinnati G & E	130.5	27.4	183	3
230	276	Mesa Petroleum	129.9	12.9	192	2
231	257	Pacific Lighting	128.9	4.6	204	2
232	351	Humana	127.1	36.5	227	2
233	264	Farmers Group	126.6	6.4	212	2
234	180	Levi Strauss	126.6	–26.5	178	3
235	137	Houston Industries	126.2	–41.7	605	
236	167	Upjohn	126.0	–30.7	192	2
237	222	Household Intl	125.4	–11.8	443	1
238	277	Chesebrough-Pond's	125.3	9.1	168	3
239	268	Bank of Boston	124.4	4.9	188	3
240	384	Wal-Mart Stores	124.1	49.9	164	3
241	185	Union Camp	124.0	–26.6	271	2
242	209	Stauffer Chemical	123.5	–17.6	327	1
243	238	Lincoln National	121.3	–8.6	1,116	
244	■	Tosco	120.9	435.5	146	3
245	261	Marsh & McLennan	120.4	0.3	131	3
246	244	First City Bancorp	120.3	–6.8	195	2
247	188	Southern Pacific	120.1	–28.4	365	1
248	282	Rowan Cos	119.4	6.8	199	2
249	292	Potomac Elec Power	119.0	8.5	227	2
250	233	AMP	118.9	–11.8	196	2
251	322	Public Service Colo	116.5	15.6	243	2
252	301	Public Service N M	115.8	7.3	125	3
253	337	First Bank System	114.7	18.5	206	2
254	187	USF&G	114.1	–32.3	800	
255	240	Texas Gas	113.5	–13.4	253	2
256	139	Signal Cos	113.2	–47.1	287	2
257	192	CBS	112.5	–31.3	214	2
258	348	Dayton Power & Light	112.2	19.4	152	3
259	175	Revlon	111.1	–36.4	196	2
260	332	McGraw-Hill	110.0	12.1	138	3

■ Not on 500 list in 1981

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*As named by National Mall Monitor, the leading trade publication for Shopping Center Developers.

The Forbes Profits 500

Rank 1982	Rank 1981	Company	Net profits ($000,000)	% change over 1981	Cash flow ($000,000)	Cash flow rank 1982
261	358	New England Electric	108.3	19.1	202	281
262	309	Centel	108.2	3.5	285	207
263	347	Southland	108.1	14.7	235	246
264	270	General Signal	107.8	–8.0	153	348
265	349	Esmark	107.6	14.7	206	276
266	291	Safeco	107.6	–2.1	192	294
267	296	Duquesne Light	107.3	–1.5	159	346
268	412	Wang Laboratories	107.1	37.2	189	299
269	328	Capital Holding	106.9	7.6	588	78
270	379	Waste Management	106.5	26.8	198	283
271	232	Greyhound	106.2	–21.4	246	236
272	250	Air Prods & Chems	105.7	–16.2	311	191
273	381	Toledo Edison	105.5	26.9	129	393
274	153	Continental Corp	105.2	–48.3	208	272
275	404	Oklahoma Gas & Elec	105.1	32.9	203	279
276	■	PNC Financial	104.5	9.0	144	364
277	329	Petrolane	104.3	5.1	190	297
278	298	Belco Petroleum	104.0	–4.4	181	315
279	342	Winn-Dixie Stores	103.5	8.5	215	261
280	■	Chrysler	103.2	D–P	563	87
281	323	Knight-Ridder News	102.9	2.6	162	341
282	464	Mercantile Texas	102.0	62.0	150	351
283	414	Genuine Parts	100.2	29.2	115	416
284	258	Walt Disney	100.1	–17.6	217	259
285	338	Puget Sound Pwr & Lt	99.2	2.6	114	419
286	307	Quaker Oats	96.9	–7.9	169	333
287	394	Capital Cities Commun	96.3	19.6	138	373
288	383	So Carolina E & G	96.1	16.0	148	353
289	370	Arkla	95.4	8.9	195	288
290	388	Zapata	95.3	16.6	206	274
291	364	Gulf United	94.8	6.5	247	234
292	373	Marriott	94.3	9.5	231	250
293	395	Hershey Foods	94.2	17.2	139	369
294	359	Ethyl	93.5	2.9	171	331
295	■	First Boston	93.0	101.0	100	442
296	340	Gould	92.8	–3.0	163	340
297	382	Fort Howard Paper	92.4	11.3	137	374
298	341	Lucky Stores	92.2	–3.4	194	292
299	295	So New England Tel	91.7	–15.8	278	213
300	155	Martin Marietta	91.6	–54.2	188	301
301	415	Public Service N H	91.6	18.7	43	498
301	■	VF	91.6	75.5	107	428
303	211	Burroughs	91.2	–38.8	471	115
304	405	R R Donnelley & Sons	91.2	15.4	181	316
305	389	Bally Manufacturing	91.0	11.4	173	330
306	367	Allied Stores	90.7	2.6	176	324
307	455	American Stores	90.4	40.0	184	306
308	361	General Instrument	90.0	32.2	146	360
309	339	Dover	89.8	–6.6	128	394
310	325	Northwest Bancorp	89.1	–11.0	209	269
311	377	CBI Industries	88.2	4.8	160	343
312	317	Jewel Cos	88.1	–13.3	162	342
313	432	Dow Jones	88.1	23.4	120	406
314	288	Cabot	88.0	–20.1	160	344
315	390	Marine Midland Bks	87.0	7.0	175	325
316	230	Hercules	86.9	–36.4	183	310
317	297	Big Three Industries	86.8	–20.3	184	307
318	444	Brown-Forman Dist	86.8	29.0	100	441
319	256	MCOR	86.8	–29.6	306	194
320	324	Combined Internatl	86.6	–13.6	258	227
321	■	MCI Communications	86.5	361.3	185	3
322	326	Jefferson-Pilot	86.1	–13.9	136	3
323	269	Interco	85.8	–27.7	137	3
324	352	Rohm & Haas	85.6	–8.0	203	2
325	401	Global Marine	84.9	6.4	204	2
326	448	Kansas Gas & Elec	84.7	28.3	55	4
327	273	City Investing	84.6	–26.7	403	1
328	204	Textron	84.4	–44.4	136	3
329	330	Kidde	84.2	–15.1	141	3
330	369	Joy Manufacturing	83.7	–4.6	125	4
331	280	Hilton Hotels	83.4	–26.0	131	3
332	437	Pitney Bowes	83.1	19.5	179	3
333	425	Ryder System	82.6	11.6	327	1
334	465	Allied Bancshares	82.3	30.9	131	3
335	481	Western Union	82.3	39.4	229	2
336	236	Smith International	82.3	–38.2	147	3
337	315	Florida Progress	82.1	–20.0	241	2
338	451	NBD Bancorp	81.7	25.3	125	4
338	334	Valero Energy	81.7	–16.1	138	3
340	408	E F Hutton Group	81.1	2.9	174	3
341	335	Irving Bank	81.0	–16.5	129	3
342	403	Kansas City Pwr & Lt	80.9	2.3	86	4
343	275	Mitchell Energy & Dev	80.3	–30.3	237	2
344	420	Emhart	80.2	6.2	122	4
345	■	Idaho Power	80.1	66.7	165	3
346	398	Tektronix	79.5	–0.9	145	3
347	229	National Distillers	79.1	–42.2	135	3
348	312	Norton Simon	79.1	–23.7	216	2
349	■	Amer Medical Intl	78.8	55.1	166	3
350	331	USLIFE	78.7	–20.1	210	2
351	346	Gt Northern Nekoosa	78.5	–17.4	180	3
352	435	Associated Dry Goods	78.4	12.4	163	3
353	479	Federal Express	78.4	32.1	156	3
354	106	Continental Illinois	77.9	–69.4	585	
355	368	Masco	77.6	–12.1	120	4
356	355	GEICO	77.5	–15.4	76	4
357	419	Becton, Dickinson	76.7	1.1	138	3
358	363	Tucson Electric Pwr	76.4	–14.9	210	2
359	406	Parker Drilling	76.3	–3.4	173	3
360	462	Southwestern Pub Svc	76.3	19.6	109	4
361	219	Louisiana Land	76.3	–47.5	390	1
362	430	Roadway Services	76.2	6.0	119	4
363	■	NCNB	76.1	38.4	127	3
364	228	Holiday Inns	76.0	–44.7	339	1
365	422	Helmerich & Payne	75.7	0.6	126	3
366	311	Harris Corp	75.6	–27.3	183	3
367	436	Torchmark	75.4	8.2	317	1
368	■	Natl Medical Entrprs	75.2	45.2	136	3
369	400	Kemper	75.0	–6.3	411	1
370	333	Corning Glass Works	74.5	–23.5	114	4
371	235	Scott Paper	74.5	–44.2	370	1
372	313	Chubb	74.2	–28.3	179	3
373	336	MAPCO	73.8	–23.8	218	2
374	482	Delmarva Power & Lt	73.6	25.3	135	3
375	310	North Amer Philips	73.6	–29.3	146	3
376	439	Foremost-McKesson	73.5	6.2	117	4
377	350	Reading & Bates	73.3	–21.6	186	3
378	485	Bank of New York	73.2	25.9	146	3
379	418	Lear Siegler	72.3	–5.0	103	4
380	314	Square D	71.7	–30.3	111	4

■ Not on 500 list in 1981. D–P: deficit to profit.

CBI completed the world's heaviest steel platform support structure for offshore oil in late 1982, the single largest construction job in our 94 year history.
It won't be our largest for long. We're already constructing a natural gas, propane and butane storage project in the Arabian Gulf that is bigger yet.
In times like these when a company continues to complete record-breaking global contracts on time, that company must be doing something right.
CBI. For the big jobs. Worldwide.
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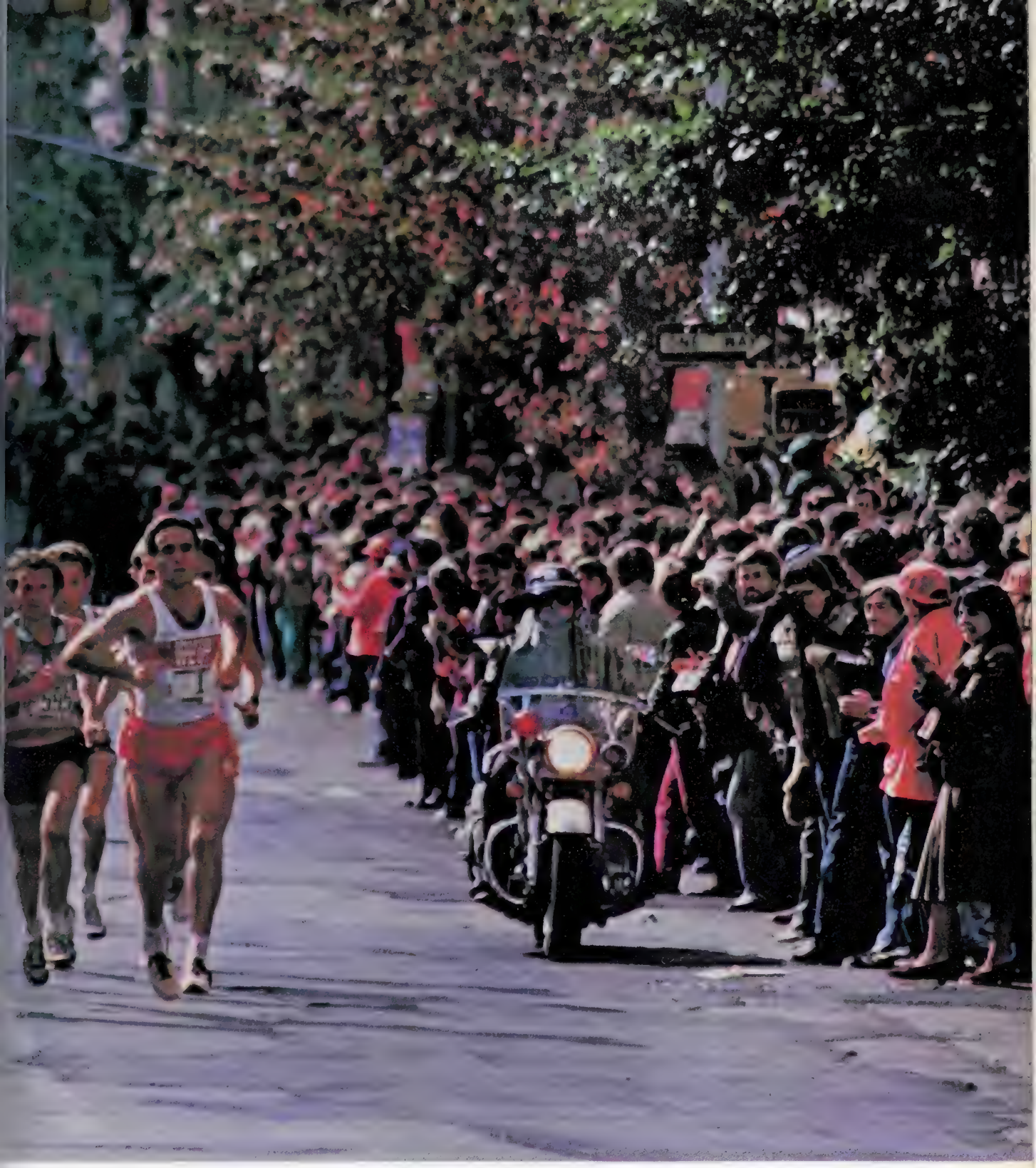
CBI Industries, Inc.
Oak Brook, Illinois

The 1982 New York City Marathon, co-sponsored by Manufacturers Hanover

The marketplace only accepts achievement.

Manufacturers Hanover succeeds.



Consistency, quality, loyalty.
Three qualities that clearly show
mselves in Alberto Salazar's victory
ne 1982 New York Marathon.

Consistency of winning, not once,
wice, but three consecutive times.
ning in spite of increasingly strong
npetition each year.

Quality of performance to call on extra effort, break away from the pack and be one of the best.

Loyalty of spirit to commit to endless training and mental preparation.

These same core values, witnessed by millions of our neighbors as they experienced this extraordinary event, have enabled Manufacturers Hanover to emerge as a $64 billion diversified financial services organization, with a network of over 700 offices worldwide.

To compete demands acceptance of the challenges in the marketplace. And rising to accept those challenges. Consider the source.

MANUFACTURERS HANOVER

The financial source. Worldwide.

Member FDIC

The Forbes Profits 500

Rank 1982	Rank 1981	Company	Net profits ($000,000)	% change over 1981	Cash flow ($000,000)	Cash flow rank 1982
381	463	Pioneer Hi-Bred Intl	71.6	12.8	90	456
382	466	Crocker National	71.6	13.8	134	384
383	■	Tidewater	71.5	35.4	144	363
384	495	El Paso Electric	70.9	25.0	71	484
385	409	Jack Eckerd	70.7	–10.0	108	426
386	469	Montana Power	70.6	13.8	88	459
387	442	Republic New York	70.5	3.9	107	432
388	441	Avnet	70.5	3.6	194	290
389	396	Noble Affiliates	70.3	–12.5	183	311
390	449	Rochester Gas & Elec	70.0	6.5	101	440
391	487	Mercantile Stores	69.9	20.8	99	444
392	433	American Natl Ins	69.5	–2.7	213	263
393	345	Sundstrand	69.3	–27.1	123	402
394	176	Ralston Purina	69.1	–60.5	274	217
395	399	No Indiana Pub Svc	69.0	–13.9	175	326
396	454	Super Valu Stores	68.0	5.1	112	422
397	407	Provident Life & Acc	67.2	–14.8	263	223
398	380	Richardson-Vicks	66.9	–19.6	95	447
399	■	Southwest Bancshares	66.6	52.9	82	466
400	472	Central Ill Pub Svc	66.3	7.3	123	404
401	477	Eastern Gas & Fuel	66.1	10.0	125	399
402	197	Freeport-McMoran	65.9	–58.6	343	174
403	■	United Illuminating	65.8	32.7	62	493
404	■	Coastal Corp	65.6	D–P	241	242
405	499	Cox Communications	65.4	17.9	159	345
406	371	Celeron	65.0	–25.0	118	411
407	■	Deluxe Check Printers	64.9	21.5	105	434
408	431	Engelhard	64.8	–9.5	102	437
409	461	Kaneb Services	64.2	0.5	145	361
410	■	Toys "R" Us	64.2	31.2	78	477
411	■	Kansas Power & Light	64.1	17.6	107	429
412	385	Storage Technology	63.3	–23.2	190	296
413	447	Intl Flavors & Frag	63.2	–4.5	78	480
414	321	Westvaco	63.1	–37.4	173	329
415	■	Browning-Ferris Inds	62.7	29.3	133	386
416	411	Perkin-Elmer	62.7	–19.8	91	454
417	305	A E Staley Mfg	62.6	–40.8	136	380
418	486	AmeriTrust	62.0	6.8	109	425
419	489	Alco Standard	61.6	6.5	86	461
420	287	Pioneer	61.5	–44.2	194	291
421	■	Apple Computer	61.3	55.5	86	462
422	365	Overseas Shipholding	60.6	–31.5	107	430
423	429	Avco	60.5	–16.2	364	165
424	427	Boston Edison	60.4	–17.5	170	332
425	■	United States Shoe	60.1	2.3	79	475
426	■	Brown Group	59.6	8.1	82	465
427	■	Washington Water Pwr	59.4	28.3	69	487
428	■	USAir Group	59.1	15.7	147	355
429	438	Whittaker	58.7	–15.4	81	470
430	■	Indianapolis Pwr & Lt	58.5	26.9	99	443
431	452	Ogden	58.5	–10.2	150	352
432	■	Albertson's	58.4	20.4	113	421
433	391	Nalco Chemical	58.1	–28.4	95	446
434	457	Alleghany	57.9	–11.4	535	94
435	■	Auto Data Processing	57.8	22.0	114	418
436	460	Parker-Hannifin	57.7	–10.0	92	452
437	■	Banc One	57.5	49.1	94	451
438	459	Foster Wheeler	57.2	–11.1	62	494
439	413	Ohio Casualty	57.0	–26.7	84	463
440	■	Barnett Banks Fla	56.8	37.9	95	445
441	■	Philadelphia Natl	56.7	58.8	84	
442	318	Western Co No Amer	56.7	–44.1	131	
443	493	Wyman-Gordon	56.4	–1.5	79	
444	■	Oneok	56.1	20.1	134	
445	■	Walgreen	56.1	33.1	95	
446	■	Anderson, Clayton	55.4	7.8	74	
447	■	U S Tobacco	55.3	28.7	70	
448	■	Rite Aid	55.0	38.0	80	
449	248	Consol Freightways	54.8	–56.9	116	
450	410	Vulcan Materials	54.7	–30.2	126	
451	■	Iowa-Illinois G & E	54.5	15.5	102	
452	■	Kentucky Utilities	54.5	39.7	116	
453	424	American Petrofina	54.4	–26.6	142	
454	■	New York Times	54.3	8.6	123	
455	■	Johnson Controls	53.8	11.9	107	
456	■	Stone & Webster	53.8	37.7	64	
457	■	Wachovia	53.4	3.1	78	
458	353	Olin	53.3	–42.6	210	
459	214	El Paso	53.2	–63.9	333	
460	■	First Security	53.1	30.3	91	
461	108	Deere	52.9	–78.9	166	
462	■	Southeast Banking	52.6	6.8	95	
463	274	Burlington Inds	52.5	–54.5	209	
463	■	Trust Co of Georgia	52.5	16.7	81	
465	■	Washington Post	52.4	60.2	81	
466	162	Ingersoll-Rand	52.3	–73.0	129	
467	456	U S Bancorp	52.1	–19.3	120	
468	194	Georgia-Pacific	52.0	–67.5	413	
469	271	Dana	51.6	–55.4	136	
470	378	McGraw-Edison	51.5	–38.8	137	
471	443	Pogo Producing	51.3	–24.3	178	
472	■	National Svc Inds	50.6	1.1	74	
473	■	Valley National	50.5	–7.2	115	
474	397	Tesoro Petroleum	50.1	–37.5	120	
475	497	W W Grainger	50.1	–10.9	78	
476	■	Citizens & Sthrn Ga	50.0	14.9	90	
477	■	Revco D S	49.6	10.0	71	
478	■	NIKE	49.0	88.9	55	
479	■	Carter Hawley Hale	49.0	9.5	142	
480	■	State Street Boston	48.9	86.4	68	
481	■	A H Robins	48.7	10.1	62	
482	392	Newmont Mining	48.6	–40.1	89	
483	■	Minnesota Power	48.4	16.5	106	
484	■	Mountain Fuel Supply	48.4	60.6	118	
485	494	Ex-Cell-O	48.2	–15.2	79	
486	■	General Cinema	48 0	8.5	88	
487	■	TECO Energy	48.0	0.8	151	
488	■	Mission Insurance	47.8	4.7	16	
489	■	Entex	47.7	11.2	222	
490	234	IC Industries	47.6	–64.6	190	
491	354	Lubrizol	47.6	–48.3	102	
492	■	Medtronic	47.4	13.3	67	
493	■	Wisconsin Pwr & Lt	47.4	16.3	107	
494	393	Allegheny Intl	47.3	–41.7	80	
495	402	Baldwin-United	47.0	–40.7	NA	
496	■	Electronic Data Systems	47.0	24.2	58	
497	■	Rollins	46.0	3.6	95	
498	■	Peoples Energy	46.0	–4.7	105	
499	■	Brooklyn Union Gas	45.9	23.0	81	
500	■	G Heileman Brewing	45.7	13.5	80	

■ Not on 500 list in 1981. D–P: deficit to profit. NA: not available.

Clickety-clackity-clunkkkity-chug-a-chug-a-chug-psssst-clickety-clack-clop-cloppity-ding-a-ling-ding-a-ling-ding-chug-a-lug-chug-chuggalug-cla-boing-cla-boomity-bam-chug-chug-chug-chugggity-clunkkkity-clunk-click-clunk-ting-ting-ting-clop-clopppity-cluggity-clug-cluggity-bang!

Before.

Hum-m-m-m-m-m-m-m-m-m-m

After.

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Old equipment isn't as productive as new equipment.
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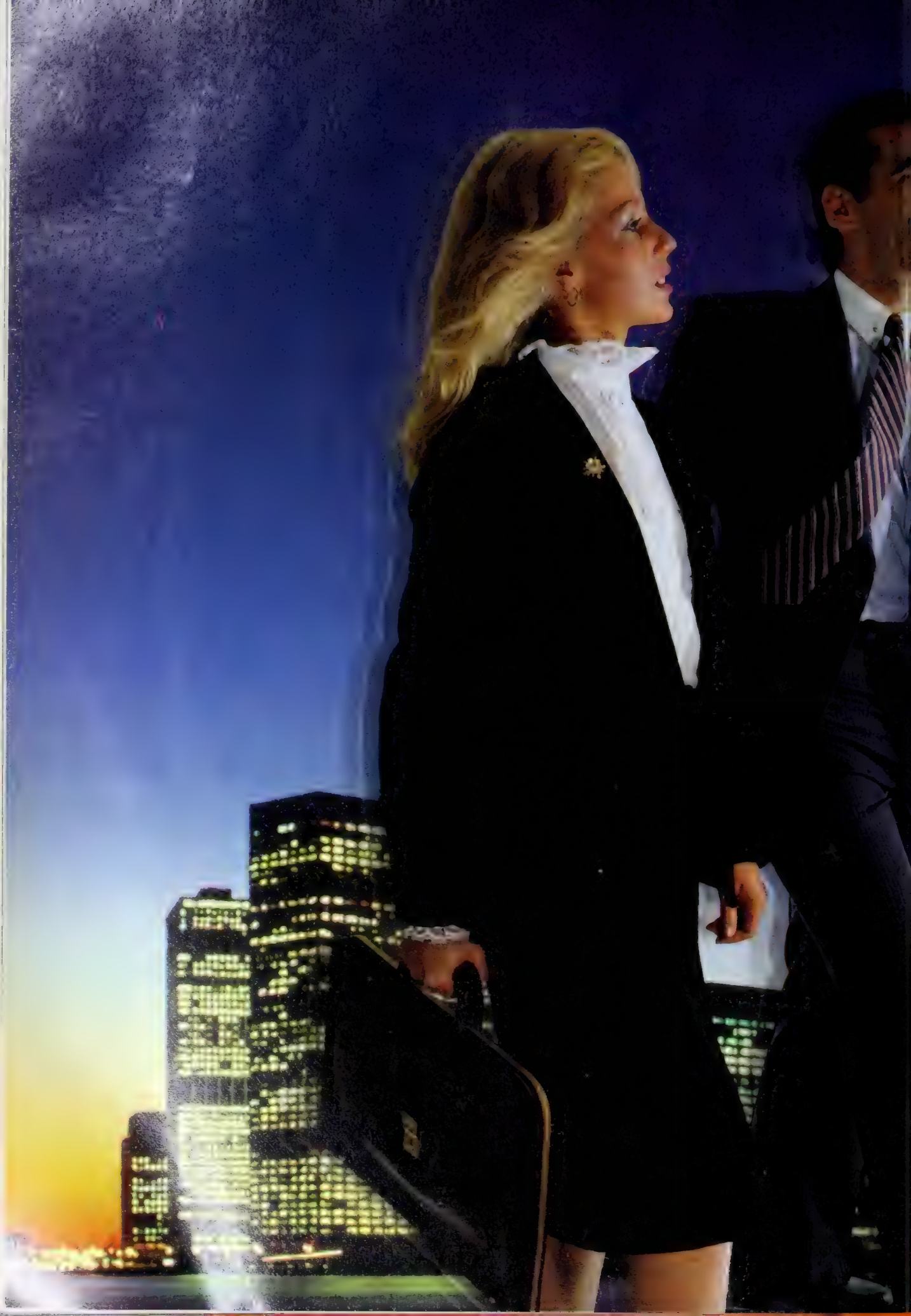
ALLIED Corporation

Chemicals/Fibers & Plastics/Oil & Gas/Electronics/Aerospace/Automotive/Industrial/Health & Scientific



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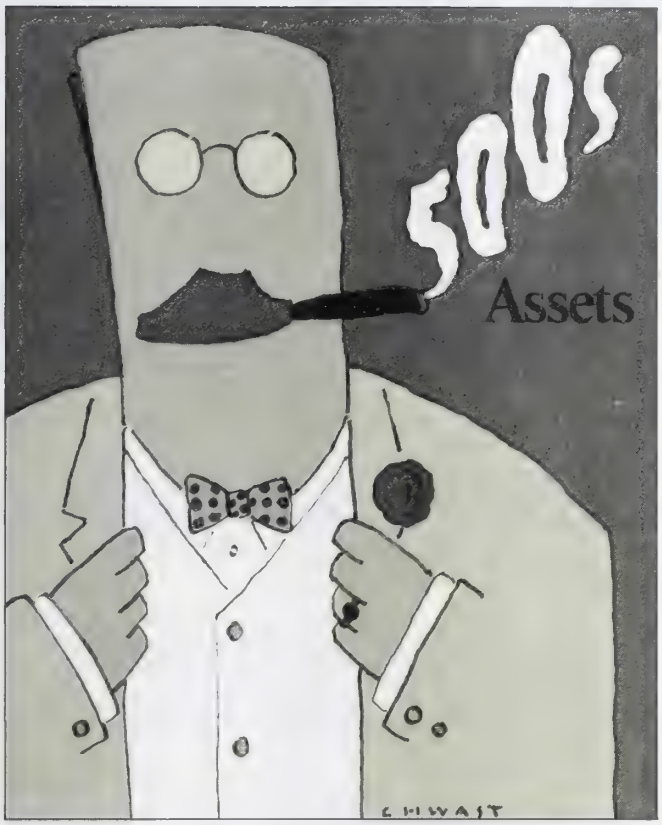
The Forbes Assets 500

Assets of the top 500 were up nearly a third of a trillion dollars last year. The only problem: The increased assets did not generate growth in sales and earnings.



WHILE TOTALS for the Forbes Sales 500 were essentially flat from 1981 to 1982 and profits were down sharply, assets of the 500 big companies on the following table increased by $321 billion. That's a characteristic of a recession—asset increases that don't generate more sales or bigger profits.

Rank 1982	Rank 1981	Company	Assets ($000,000)	% change over 1981
1	1	American Tel & Tel	148,186	7.6
2	3	Citicorp	129,997	9.0
3	2	BankAmerica	122,221	0.9
4	4	Chase Manhattan	80,863	3.9
5	6	Fedl Natl Mortgage	73,467	18.3

At the end of the year, total assets stood at $3,829,297,000,000, an increase of 9.2%. Much of that represented real assets growth, moreover, since it was substantially above last year's 3.9% inflation rate.

Banks and financial services companies customarily dominate the assets list, and 1982 was no exception. In fact, with the rise of the new financial supermarkets through merger and acquisition, and the troubles of the auto industry and other old-line smokestack companies, that trend was even more marked. Only two nonfinancial companies, Exxon and AT&T, are among the top ten. Elsewhere on the list, financial services companies often were moving up while industrial companies were slipping a notch or two.

For example, Phibro acquired Wall Street's Salomon Brothers and vaulted from 126th to 15th. PNC Financial, formed by the merger of two big banks, took over 66th place on the list. By contrast, Mobil moved from 14th to 18th and Standard of California slipped a few notches, as did General Electric. Ford went from 28th to 32nd on a $1 billion assets decrease. U.S. Steel gained, but through nonsteel acquisition. The new Norfolk Southern Corp. took over 120th place, but through merger.

How productive were these assets? Put simply, a dollar of assets produced 56 cents in sales and 2 cents in profits, compared with 61 cents in sales and 3 cents in profits the previous year.

Altogether, 23 new companies made the Assets 500 list this year, including Charter, Combined International, Northwest Energy, Avon Products, Suburban Bancorp, Walt Disney Productions, Ethyl, Marriott, Puget Sound Power & Light, American Broadcasting Cos., Mitchell Energy & Development, City National, Southland, Farmers Group, Corning Glass Works, Baxter Travenol Laboratories, Kansas City Power & Light, First New Mexico Bankshare Corp. and fast-growing Humana.

Among the companies they knocked off were some famous names: General Tire & Rubber, National Distillers, Gillette, McGraw-Edison. History in the making.

The Forbes Assets 500

Rank 1982	Rank 1981	Company	Assets ($000,000)	% change over 1981
6	7	Mfrs Hanover	64,041	8.3
7	5	Exxon	62,289	–1.0
8	8	J P Morgan	58,597	9.5
9	10	Chemical New York	48,275	7.5
10	11	Aetna Life & Cas	44,211	11.6
11	9	Continental Illinois	42,899	–8.7
12	12	General Motors	41,363	6.3
13	13	First Interstate Bancp	40,884	10.6
14	16	Bankers Trust NY	40,427	18.2
15	126	Phibro-Salomon	39,669	51.7
16	18	Security Pacific	36,991	12.1
17	15	Sears, Roebuck	36,643	6.2
18	14	Mobil	36,439	4.8
19	17	First Chicago	35,876	6.9
20	19	IBM	32,541	10.0
21	21	CIGNA	31,395	9.6
22	20	Intl Tel & Tel	29,172	0.7
23	23	American Express	28,311	12.8
24	24	Travelers	27,989	16.7
25	22	Texaco	27,114	–1.4
26	30	Crocker National	24,939	10.9
27	27	Wells Fargo	24,814	6.9
28	25	E I du Pont	24,343	2.2
29	29	Standard Oil Ind	24,289	6.0
30	26	Standard Oil Calif	23,465	–0.8
31	31	GTE	22,294	5.6
32	28	Ford Motor	21,956	–4.6
33	35	Atlantic Richfield	21,633	9.6
34	32	General Electric	21,615	3.2
35	34	Shell Oil	21,376	6.3
36	40	InterFirst	21,030	21.4
37	39	Merrill Lynch	20,697	17.1
38	33	Gulf Oil	20,436	0.0
39	37	Mellon National	20,294	10.0
40	36	Marine Midland Bks	20,239	8.3
41	38	Irving Bank	19,514	7.1
42	50	United States Steel	19,432	45.9
43	41	Bank of Boston	18,267	8.7
44	47	Texas Commerce Bshs	18,217	25.5
45	44	Northwest Bancorp	17,585	16.1
46	42	Tenneco	17,378	3.4
47	65	First Boston	17,324	68.0
48	48	RepublicBank	17,218	19.2
49	46	First Bank System	16,899	13.3
50	45	H F Ahmanson	16,864	12.1
51	49	First City Bancorp	16,567	15.9
52	43	Standard Oil Ohio	16,016	1.7
53	82	Occidental Petroleum	15,772	95.3
54	56	Commonwlth Edison	13,729	11.9
55	55	Pacific Gas & Elec	13,635	10.3
56	81	American General	13,276	64.4
57	51	RCA	12,932	–2.1
58	60	Bank of New York	12,724	11.0
59	63	Gt Western Financial	12,675	19.1
60	57	NBD Bancorp	12,407	2.2
61	54	Southern Company	12,301	–0.9
62	59	American Elec Power	12,224	5.7
63	61	Phillips Petroleum	12,097	7.4
64	58	Sun Company	12,019	1.7
65	53	Dow Chemical	11,807	–5.5
66	■	PNC Financial	11,611	13.5
67	87	NCNB	11,560	49.6
68	69	Getty Oil	11,404	3.9
69	52	Gulf & Western Inds	10,902	–13.9
70	64	Union Carbide	10,616	1.8
71	70	Eastman Kodak	10,614	12.5
72	73	Transamerica	10,423	15.3
73	67	Loews	10,402	4.9
74	78	Middle South Utils	10,365	24.6
75	80	R J Reynolds Inds	10,355	27.9
76	104	Mercantile Texas	10,190	48.3
77	74	So Calif Edison	10,158	16.4
78	62	Seafirst	10,028	–6.7
79	97	Union Pacific	9,999	40.9
80	72	Lincoln National	9,953	10.0
81	71	Philip Morris	9,692	4.8
82	66	National Steel	9,578	–5.3
83	68	First Charter Finl	9,388	–3.7
84	88	Republic New York	9,280	20.4
85	85	American Intl Group	9,120	14.6
86	83	Continental Corp	8,619	6.8
87	90	Union Oil California	8,511	12.1
88	79	Westinghouse Elec	8,427	1.3
89	163	Baldwin-United	8,399	69.4
90	77	Household Intl	8,235	–1.9
91	84	CSX	8,109	0.5
92	94	Texas Utilities	8,021	9.8
93	91	United Technologies	7,993	5.8
94	93	J C Penney	7,939	27.7
95	96	Pub Svc Elec & Gas	7,907	8.7
96	86	Consolidated Edison	7,872	1.8
97	89	Xerox	7,668	–0.1
98	107	Detroit Edison	7,636	15.6
99	103	Consumers Power	7,594	10.5
100	100	Boeing	7,593	9.2
101	76	City Investing	7,555	–11.4
102	99	Procter & Gamble	7,510	7.9
103	119	Comerica	7,378	19.9
104	132	E F Hutton Group	7,365	30.6
105	98	Va Electric & Power	7,359	4.3
106	106	K mart	7,344	10.1
107	109	Southeast Banking	7,274	12.7
108	136	Golden West Finl	7,269	31.2
109	95	Caterpillar Tractor	7,201	–1.2
110	120	Valley National	7,183	17.1
111	111	Phila Electric	7,158	13.5
112	92	Harris Bankcorp	7,137	–4.7
113	108	Duke Power	7,058	8.1
114	139	Barnett Banks Fla	6,932	25.9
115	151	Southwest Bancshares	6,927	31.9
116	114	Wachovia	6,916	
117	102	Control Data	6,912	
118	121	Florida Power & Lt	6,851	
119	143	National City	6,823	
120	■	Norfolk Southern	6,803	
121	116	Walter E Heller Intl	6,647	
122	219	Fin Corp of America	6,612	
123	118	Michigan National	6,504	
124	112	Philadelphia Natl	6,301	
125	146	Allied Corp	6,272	
126	113	Chrysler	6,264	
127	115	American Brands	6,256	
128	117	Northern Trust	6,253	
129	75	Beneficial Corp	6,212	
130	105	Armco	6,208	
131	218	Kemper	6,174	
132	148	First Union	6,168	
133	110	Amerada Hess	6,145	
134	122	Monsanto	6,077	
135	123	Avco	6,038	
136	183	Allied Bancshares	6,011	
137	164	Citizens & Sthrn Ga	6,005	
138	131	Alcoa	5,990	
139	128	Deere	5,936	
140	127	Weyerhaeuser	5,924	
141	125	Rainier Bancorp	5,865	
142	138	BancOhio	5,822	
143	129	Burlington Northern	5,797	
144	130	U S Bancorp	5,756	
145	137	AmeriTrust	5,753	
146	133	Continental Group	5,727	
147	156	Mercantile Bancorp	5,691	
148	153	Houston Industries	5,672	
149	134	Halliburton	5,582	
150	135	International Paper	5,566	
151	157	Teledyne	5,562	
152	162	Penn Power & Light	5,531	
153	142	Minn Mining & Mfg	5,514	
154	140	Southern Pacific	5,512	
155	150	First Pennsylvania	5,433	
156	207	Shawmut	5,376	
157	179	Long Island Lighting	5,350	
158	152	Sperry	5,343	
159	165	Donaldson, Lufkin	5,325	
160	177	St Paul Cos	5,318	
161	■	Charter	5,310	
162	154	Manufacturers Natl	5,284	
163	155	Imperial Corp of Am	5,271	
164	181	Ohio Edison	5,247	
165	270	Huntington Bancshs	5,245	
166	144	Goodyear	5,194	
167	159	General Public Utils	5,181	
168	176	Columbia Gas System	5,155	
169	158	Georgia-Pacific	5,150	
170	173	Central & South West	5,135	

■ Not on 500 list in 1981

J&H thinks the way to get the best international insurance service is to get the best broker in each country.

What do you think?

If you think that local experience is vital to risk management programs in foreign countries, we couldn't agree more.

That's the concept that built the J&H international network, the most experienced in the world.

Starting in the 1890's, we enlisted the outstanding insurance broker in each country as our exclusive working partner. Where this wasn't possible, we opened our own J&H offices.

In Europe, our correspondents are now linked in a unique working relationship we call UNISON, a network within our network. Besides offering an unsurpassed grasp of local requirements, UNISON adds new dimensions to our ability to coordinate programs internationally.

Today, the J&H international network is a global organization of 13,000 people dedicated to serving clients with a single standard of excellence.

This is why we're the primary international broker for 33 of the top 100 U.S. multinationals and why 24 more have us on their team.

We'd like to talk with you about this.

Johnson & Higgins

We answer only to you.

RISK AND INSURANCE MANAGEMENT SERVICES; EMPLOYEE BENEFIT AND ACTUARIAL CONSULTING THROUGHOUT THE WORLD

The Forbes Assets 500

Rank 1982	Rank 1981	Company	Assets ($000,000)	% change over 1981
171	160	Dart & Kraft	5,134	1.6
172	147	Centerre Bancorp	5,122	–4.0
173	141	AMAX	5,090	–6.6
174	169	USF&G	5,079	7.0
175	234	CBT	5,070	41.8
176	182	Bank of New England	5,065	14.0
177	199	Panhandle Eastern	5,061	24.1
178	180	Maryland National	5,055	12.3
179	231	Banc One	5,029	38.2
180	223	Sun Banks of Florida	5,004	34.9
181	178	Superior Oil	4,993	10.5
182	171	Carolina Pwr & Lt	4,951	5.0
183	235	Coca-Cola	4,923	38.1
184	161	W R Grace	4,916	–2.1
185	166	Rockwell Intl	4,870	1.3
186	195	First Natl State Bcp	4,868	18.6
187	210	United Virginia Bshs	4,848	23.5
188	168	Gibraltar Financial	4,847	1.6
189	170	First Wisconsin	4,836	2.3
190	174	United Telecom	4,754	2.9
191	189	Beatrice Foods	4,744	12.0
192	192	General Re	4,741	13.7
193	191	Niagara Mohawk Pwr	4,736	13.4
194	172	Santa Fe Industries	4,732	1.2
195	204	Texas American Bshs	4,717	16.7
196	185	Fluor	4,701	6.2
197	203	Union Electric	4,631	14.4
198	186	McDonnell Douglas	4,622	5.9
199	149	Bethlehem Steel	4,611	–12.7
200	193	First Security	4,609	10.8
201	208	UAL	4,579	15.2
202	197	Federated Dept Stores	4,574	11.7
203	198	Texas Eastern	4,542	10.9
204	190	Fleet Financial	4,536	7.4
205	257	City Federal S & L	4,528	35.3
206	242	Trust Co of Georgia	4,511	30.4
207	240	First Atlanta	4,480	28.6
208	188	Honeywell	4,471	3.2
209	206	Pacific Pwr & Lt	4,412	9.8
210	233	Alleghany	4,403	22.0
211	200	Midlantic Banks	4,339	6.4
212	269	Paine Webber	4,295	34.0
213	196	Ashland Oil	4,210	2.8
214	214	Johnson & Johnson	4,210	10.2
215	202	PepsiCo	4,197	3.5
216	222	El Paso	4,180	12.6
217	201	California First Bnk	4,156	2.3
218	317	Hartford National	4,128	46.1
219	184	Burroughs	4,123	–7.1
220	228	Fidelcor	4,120	12.4
221	245	Nationwide	4,087	18.6
222	236	Capital Holding	4,064	14.2
223	215	Greyhound	4,057	6.4
224	209	Northeast Utilities	4,029	2.0
225	243	Digital Equipment	4,024	16.4
226	187	LTV	4,023	–7.2
227	217	Am Natural Resources	3,980	4.5
228	216	InterNorth	3,954	3.8
229	220	IC Industries	3,952	5.6
230	254	State Street Boston	3,915	15.6
231	205	Society	3,911	–3.0
232	312	Anheuser-Busch Cos	3,903	35.7
233	221	AMR	3,897	4.2
234	237	Lincoln First Banks	3,892	9.8
235	224	Safeway Stores	3,891	5.4
236	250	Arizona Public Serv	3,889	14.5
237	268	Virginia Natl Bshs	3,874	20.5
238	252	Transco Energy	3,866	13.9
239	238	Continental Telecom	3,865	9.1
240	276	General Foods	3,861	23.4
241	249	Cleveland Elec Illum	3,843	12.8
242	211	BanCal Tri-State	3,839	–2.2
243	225	Litton Industries	3,837	4.0
244	230	First of America Bnk	3,820	4.8
245	264	Public Service Ind	3,813	16.1
246	258	Gulf States Utils	3,806	13.8
247	248	Kerr-McGee	3,763	10.2
248	229	Pfizer	3,749	2.8
249	239	Gibraltar Savings	3,748	6.5
250	227	Riggs National	3,716	1.3
251	241	BayBanks	3,710	7.2
252	145	Intl Harvester	3,699	–30.8
253	247	Nabisco Brands	3,692	7.7
254	353	Norstar Bancorp	3,653	42.6
255	261	Merck	3,648	10.2
256	213	Kaiser Alum & Chem	3,644	–5.0
257	226	Signal Cos	3,609	–1.9
258	298	Hospital Corp of Am	3,601	21.7
259	251	Trans World	3,536	4.1
260	263	United Banks of Colo	3,522	6.9
261	266	Baltimore Gas & Elec	3,513	7.6
262	256	Raytheon	3,510	4.4
263	346	Florida Natl Banks	3,498	33.7
264	246	Champion Intl	3,472	0.8
265	323	Hewlett-Packard	3,470	25.8
266	472	First Executive	3,451	84.0
267	300	No Indiana Pub Svc	3,450	17.2
268	304	First Maryland Bncp	3,447	18.1
269	272	Allegheny Power	3,421	7.2
270	282	Fidelity Union Bncp	3,409	11.4
271	283	American Security	3,407	11.8
272	274	First Tennessee Natl	3,392	7.8
273	255	NCR	3,373	–0.4
274	316	Bank of Virginia	3,353	18.6
275	262	Reynolds Metals	3,345	1.4
276	295	Commerce Bancshrs	3,343	12.8
277	287	First Oklahoma Bncp	3,326	10.0
278	305	IntraWest Financial	3,314	13.5
279	265	Dresser Industries	3,311	1.1
280	278	Washington National	3,290	5.4
281	314	Consol Natural Gas	3,272	
282	299	PPG Industries	3,270	
283	309	McDonald's	3,263	
284	331	Pacific Lighting	3,257	
285	303	AmSouth Bancorp	3,255	
286	284	Gulf United	3,248	
287	319	United Jersey Banks	3,232	
288	291	Pennzoil	3,226	
289	273	Coastal Corp	3,226	
290	302	Eastern Air Lines	3,225	
291	327	Dominion Bankshares	3,225	
292	294	American Natl Ins	3,222	
293	279	USLIFE	3,221	
294	292	Equimark	3,215	
295	306	Chubb	3,203	
296	313	No States Power	3,197	
297	289	Diamond Shamrock	3,194	
298	338	Warner Commun	3,186	
299	308	Eli Lilly	3,155	
300	318	SONAT	3,139	
301	438	Third National	3,135	
302	286	Jefferson-Pilot	3,130	
303	277	TRW	3,125	
304	345	First Alabama Bshs	3,124	
305	253	Penn Central	3,099	
306	351	Flagship Banks	3,095	
307	329	Illinois Power	3,093	
308	334	ENSERCH	3,079	
309	370	Financial Federation	3,066	
310	350	Entex	3,052	
311	301	American Fletcher	3,038	
312	336	Torchmark	3,037	
313	259	Republic Steel	3,033	
314	367	Cullen/Frost Bankers	3,013	
315	281	American Cyanamid	2,997	
316	280	Owens-Illinois	2,996	
317	330	Safeco	2,992	
318	322	Murphy Oil	2,990	
319	355	Dayton-Hudson	2,984	
320	321	Bancorp Hawaii	2,971	
321	341	Utd Energy Resources	2,926	
322	352	Florida Progress	2,915	
323	297	Warner-Lambert	2,906	
324	324	Time Inc	2,896	
325	339	Duquesne Light	2,883	
326	343	Marshall & Ilsley	2,872	
327	293	Celanese	2,862	
328	468	SmithKline Beckman	2,858	
329	328	First Kentucky Natl	2,853	
330	320	St Regis Paper	2,852	
331	357	Martin Marietta	2,838	
332	373	Central Bancorp	2,833	
333	380	Motorola	2,833	
334	348	Natomas	2,833	
335	349	American Home Prod	2,832	

VERY SIMPLY, WE'VE CHANGED OUR NAME.

WE'RE NOW BANK OF BOSTON CORPORATION.

FIRST NATIONAL BOSTON CORPORATION, the parent company of The First National Bank of Boston, is now BANK OF BOSTON CORPORATION.

Quite simply, we've changed our name because Bank of Boston is how we are known around the world. *Bank* is the foundation on which our financial business is built. *Boston* is both the gateway to our region and our entrée to the nation and the world.

As New England's leading bank and financial institution, we believe our 200 years of strength and heritage will serve us well as we enter our third century.

It's that simple.

1784

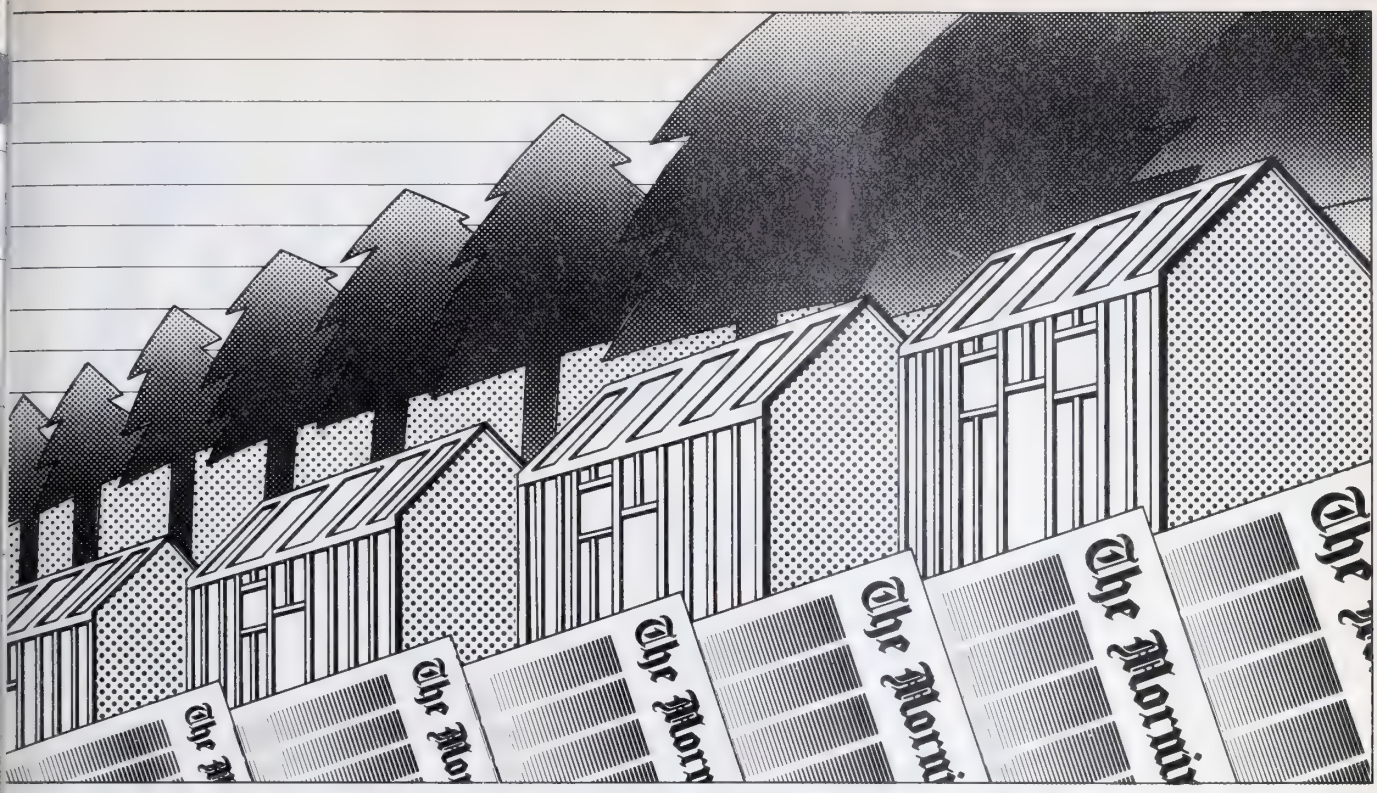
BANK OF BOSTON CORPORATION

PRINCIPAL U.S. OFFICES: BOSTON • NEW YORK • CHICAGO • DALLAS • LOS ANGELES • MIAMI WORLDWIDE OFFICES: ARGENTINA • AUSTRALIA • BAHAMAS • BELGIUM • BOLIVIA • BRAZIL • CAMEROON • CANADA • CAYMAN ISLANDS CHANNEL ISLANDS • CHILE • COSTA RICA • DOMINICAN REPUBLIC • FRANCE • GERMANY • HAITI • HONDURAS • HONG KONG • JAPAN • ITALY • KOREA • LUXEMBOURG • MEXICO • NIGERIA • PANAMA • PARAGUAY • PHILIPPINES • PUERTO RICO • SINGAPORE • SPAIN • SWITZERLAND • TAIWAN • THAILAND • UNITED KINGDOM • URUGUAY • VENEZUELA ZIMBABWE WORLD HEADQUARTERS: 100 FEDERAL STREET, BOSTON, MA

The Forbes Assets 500

Rank 1982	Rank 1981	Company	Assets ($000,000)	% change over 1981
336	340	Combustion Eng	2,824	5.9
337	363	Key Banks	2,795	11.8
338	356	First & Merchants	2,794	9.5
339	326	FMC	2,766	1.0
340	290	Centran	2,762	–8.4
341	384	Boatmen's Bancshares	2,758	17.1
342	365	Bristol-Myers	2,756	10.8
343	311	GATX	2,738	–5.0
344	362	Cincinnati G & E	2,737	9.4
345	374	Utah Power & Light	2,736	12.5
346	379	Kroger	2,730	13.5
347	335	Banco Popular PR	2,727	1.4
348	394	United Missouri Bshs	2,719	17.9
349	359	Potomac Elec Power	2,709	7.6
350	426	N Y State Elec & Gas	2,702	27.0
351	354	Indiana National	2,702	5.6
352	396	General Mills	2,702	17.4
353	296	Pan Am World Airways	2,696	–9.0
354	368	Provident Life & Acc	2,695	9.3
355	377	CBS	2,683	10.6
356	288	Firestone	2,672	–11.5
357	378	Kimberly-Clark	2,664	10.3
358	325	Boise Cascade	2,663	–2.8
359	395	Delta Air Lines	2,658	15.3
360	386	Central Bancshares	2,658	13.2
361	315	American Can	2,647	–6.7
362	389	General Dynamics	2,640	13.4
363	360	MidCon	2,639	4.9
364	411	Houston Natural Gas	2,635	19.6
365	393	Texas Instruments	2,631	13.9
366	310	Inland Steel	2,629	–9.1
367	366	NICOR	2,628	5.9
368	381	May Dept Stores	2,625	10.0
369	419	Western Savings & Loan	2,620	20.1
370	361	Borden	2,590	3.2
371	455	First American	2,587	31.7
372	375	Public Service Colo	2,575	5.9
373	342	Colgate-Palmolive	2,574	–2.2
374	383	Abbott Laboratories	2,567	9.0
375	232	Jim Walter	2,563	0.2
376	390	Atlantic Bancorp	2,535	9.1
377	427	Central Fidelity Bks	2,533	19.7
378	372	First United Bancorp	2,523	3.4
379	385	First Florida Banks	2,502	6.3
380	275	F W Woolworth	2,489	–20.8
381	484	Baker International	2,482	37.3
382	437	American Bancorp	2,471	20.4
383	429	Lockheed	2,464	17.1
384	443	Texas Oil & Gas	2,463	21.2
385	416	Borg-Warner	2,463	12.4
386	423	Natl Central Financl	2,459	13.6
387	428	Equitable Bancorp	2,458	16.4
388	333	Tiger International	2,454	–9.2
389	■	Combined Internatl	2,453	53.8
390	400	New England Electric	2,451	7.0
391	435	SouthTrust	2,441	18.5
392	401	Schering-Plough	2,429	6.3
393	421	Pillsbury	2,428	11.7
394	■	Northwest Energy	2,414	56.9
395	369	CPC International	2,413	–2.0
396	420	San Diego Gas & Elec	2,412	10.6
397	402	Citizens Fidelity	2,407	5.3
398	■	Colorado Natl Bnkshs	2,406	47.6
399	337	Ingersoll-Rand	2,403	–10.3
400	403	Consolidated Foods	2,399	5.4
401	405	CharterCorp	2,391	6.4
402	347	Crown Zellerbach	2,386	–8.8
403	424	First Hawaiian	2,384	11.0
404	397	Scott Paper	2,382	3.6
405	418	Gelco	2,373	8.7
406	332	B F Goodrich	2,371	–12.3
407	371	Williams Cos	2,370	–3.1
408	445	Moore Financial	2,361	17.1
409	439	Hughes Tool	2,361	15.5
410	392	Wisconsin Elec Pwr	2,355	1.7
411	407	Old Kent Financial	2,353	5.2
412	404	Liberty National	2,346	3.5
413	444	Marine	2,341	15.3
414	432	Arizona Bancwest	2,337	12.5
415	406	Portland Genl Elec	2,323	3.6
416	412	Emerson Electric	2,320	5.4
417	408	Amer Savings & Loan	2,306	3.6
418	440	Continental Bancorp	2,300	12.5
419	417	Commerce Union	2,289	4.6
420	398	NL Industries	2,284	–0.7
421	422	Allied Stores	2,283	4.8
422	391	Revlon	2,273	–1.9
423	413	U S Trust	2,256	2.6
424	448	First Natl Cinc	2,239	11.9
425	415	Mead	2,239	2.1
426	399	Manville	2,236	–2.7
427	■	Avon Products	2,233	42.4
428	446	Zions Utah Bancorp	2,214	10.1
429	441	Centel	2,199	8.0
430	447	Archer Danls Midland	2,195	9.7
431	456	So Carolina E & G	2,194	12.0
432	382	Norton Simon	2,193	–8.0
433	442	Stauffer Chemical	2,189	7.6
434	430	TRANSOHIO Fincl	2,176	3.7
435	470	Air Prods & Chems	2,170	15.6
436	431	ASARCO	2,153	2.9
437	■	Suburban Bancorp	2,152	29.8
438	481	Public Service N M	2,146	17.1
439	465	Old Stone	2,136	12.2
440	464	Times Mirror	2,136	11.4
441	433	H J Heinz	2,130	2.7
442	474	Toledo Edison	2,122	13.6
443	450	Northwestern Finl	2,117	6.0
444	451	Sumitomo Bank Cal	2,115	6.4
445	409	Ralston Purina	2,114	–4.7
446	■	Walt Disney	2,103	
447	376	Allegheny Intl	2,081	
448	■	Ethyl	2,075	
449	485	South Carolina Natl	2,074	
450	476	Deposit Guaranty	2,073	
451	■	Marriott	2,063	
452	480	Affiliated Bshs Colo	2,058	
453	410	Burlington Inds	2,049	
454	452	Whitney Holding	2,047	
455	473	Western Union	2,045	
456	487	Union Camp	2,045	
457	414	Textron	2,038	
458	387	Cooper Industries	2,037	
459	388	Eaton	2,030	
460	488	Amer Hospital Supply	2,018	
461	469	Dayton Power & Light	2,017	
462	499	First Virginia Banks	2,016	
463	458	Upjohn	2,014	
464	425	Phelps Dodge	2,014	
465	482	Oklahoma Gas & Elec	2,014	
466	436	Fin Cp Santa Barbara	2,007	
467	494	Peoples Bancorp	2,005	
468	364	Northwest Industries	2,002	
469	449	Hercules	2,001	
470	491	Ryder System	1,985	
471	454	Dana	1,984	
472	477	Merchants National	1,981	
473	467	So New England Tel	1,968	
474	■	Puget Sound Pwr & Lt	1,954	
475	466	First Empire State	1,947	
476	460	Newmont Mining	1,947	
477	453	Intl Minerals & Chem	1,942	
478	479	Broadview Financial	1,934	
479	463	Boston Edison	1,930	
480	462	Hospital Trust	1,930	
481	457	Squibb	1,930	
482	■	Amer Broadcasting	1,922	
483	461	Wickes Cos	1,913	
484	471	Kidde	1,909	
485	495	Carter Hawley Hale	1,883	
486	■	Mitchell Energy & Dev	1,875	
487	497	Campbell Soup	1,866	
488	■	City National	1,859	
489	■	Southland	1,843	
490	498	Indust Valley Bank	1,842	
491	496	Texas Gas	1,828	
492	475	North Amer Philips	1,826	
493	■	Farmers Group	1,803	
494	■	Corning Glass Works	1,798	
495	■	Baxter Travenol Labs	1,793	
496	■	Kansas City Pwr & Lt	1,792	
497	■	Natl Bancshares Texas	1,785	
498	■	First New Mexico Bksh	1,774	
499	493	Esmark	1,758	
500	■	Humana	1,745	

■ Not on 500 list in 1981



What do you call a company that's ready for recovery in forest products?

SONAT

Signs of a recovery in the forest products industries are beginning to appear, and Sonat's Southern Forest Products subsidiary is ready.

Southern Forest Products is 50% owner of Boise Southern Company, a joint venture with Boise Cascade Corporation, with 730,000 acres of prime Louisiana and east Texas timberlands and integrated wood products, kraft linerboard and newsprint facilities.

The joint venture took steps to improve its operating efficiency during the recent prolonged recession in forest products, and its timberlands provide a continually increasing yield of trees and mineral royalties and bonuses.

Southern Forest Products is just one part of the $3 billion energy, services and technology company called Sonat. Other operations across the U.S. and overseas include: Southern Natural Gas, Sonat Exploration, Sonat Offshore Drilling and Sonat Marine.

To learn more about us, ask your broker. Or write: Sonat Inc., Corporate Communications, Dept. FB-5/9, P.O. Box 2563, Birmingham, Alabama 35202. Telephone: 205/325-3800 or 212/344-7955. Ask for our annual report.

NYSE Ticker Symbol SNT.

Sonat: Working to make the future as good as our past.

PROCRAS

MAY BE A BIGGER RISK THAN POLLUTION

While you may consider your reasons valid for putting off pollution liability coverage, kindly consider the growing list of EPA and Justice Department lawsuits.

A company in Pennsylvania is sued for gradually contaminating groundwater that leached into the Delaware River. Clean-up costs: $67,000.

A company in New Jersey is sued retroactive to 1973. Penalty: $500,000 put in escrow as assurance that remedial actions will be completed.

A company in Indiana is made to reimburse the government $860,000, plus interest, in clean-up costs because of a gradual leakage of chemicals.

Etc., etc., etc. The figures for this growing list (now, by the way, up to 50 suits a year) belong to EPA and the Justice Department, not us.

What's more, even obeying today's environmental laws is no guarantee against a futur catastrophe.

At the AIG Companies, consider the problem of acc dental pollution, whether gra or sudden, so crucial, we've s a special department to hanc

AIG's Pollution Legal Lia Department.

A department with the bility and the experience tha already established it as a ma force in pollution insurance.

TINATION

A department staffed with people who are authorities on every aspect of pollution, to help with all the ins and outs of the many changing legal standards.

It is this experience that enables us to offer virtually the most comprehensive pollution insurance available, on a very practical, cost-efficient basis. For whatever kind of accidental pollution-gradual or sudden. Whether it be for a small chain of gas stations or multi-million dollar chemical plants. Against loss from personal injury, property damage, and even legal defense costs.

Incidentally, for over 60 years, AIG companies have seen to it that clients have received optimum protection for things like hurricanes, fires, floods, employee fraud and political upheavals.

Today you'll find AIG Companies leading the way to insuring global risks, energy risks, and all types of property and casualty risks, to mention just a few.

For more information about our pollution policy, contact AIG, Dept. A, 70 Pine Street, New York, N.Y. 10270.

However, may we gently urge you not to procrastinate.

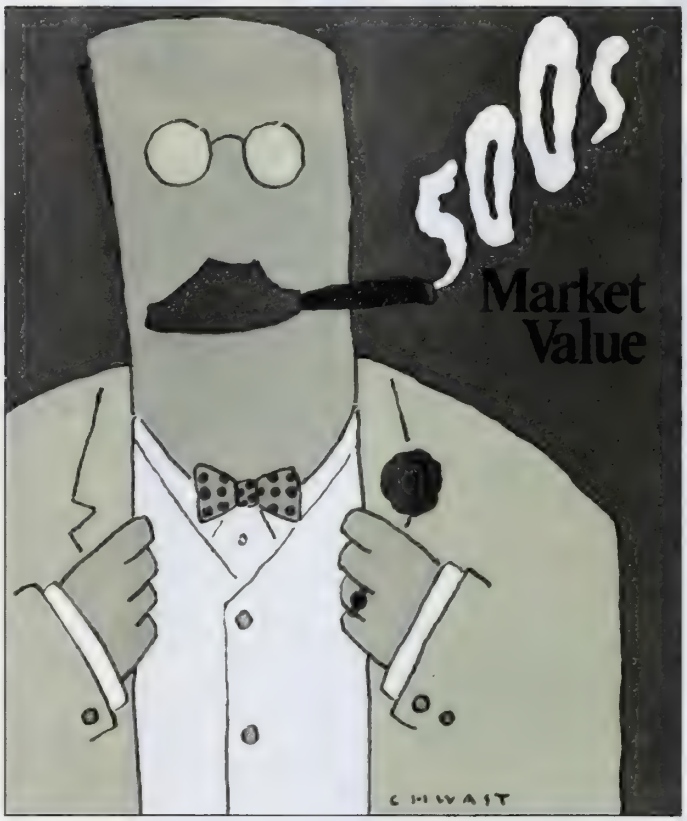
This is the one time when time may not be on your side.

ONCE AGAIN THE ANSWER IS AIG.

IG COMPANIES: *American International Underwriters, American Home Assurance Co., Commerce and Industry Insurance Co., National Union Fire Insurance Company of Pittsburgh, Pa., merican International Life Assurance Co., North American Managers, New Hampshire Insurance Co. and over 230 other companies operating around the world to meet your insurance needs*

The Forbes Market Value 500

Whatever happened to old masters and other diversions? Answer: Stocks. The top 500 issues gained $154 billion in total market value.



On the last trading day of 1981 the total worth of The Forbes Market Value 500 was $918,123,430,000. One year later it was $1,072,164,000,000—which means $154 billion was added to the worth of the 500 biggest companies in the bull market of 1982.

Rank 1982	Rank 1981	Company	Market value ($000,000)	% change over 1981
1	2	IBM	57,982	72.1
2	1	American Tel & Tel	53,225	11.1
3	3	Exxon	25,764	–5.1
4	7	General Electric	21,616	65.4
5	8	General Motors	19,447	66.4

More than 25% of that huge gain, or over $40 billion in value, came in the stock of the first ten companies, and that despite substantial erosion in the oils among them (which account for four of the ten).

Except for the oil companies, in fact, this was the year the blue chips came back. Take Chrysler, the biggest gainer on the list. Investors farsighted, or lucky, enough to have bet on Lee Iacocca's miracle on the last trading day of 1981 saw Chrysler's total market value increase nearly sixfold by a year later. IBM gained a staggering $24.3 billion in market value, General Electric $8.6 billion, General Motors $7.7 billion. Sears, Roebuck came close to doubling—from $5.6 billion to $10.5 billion—moving from 25th to 10th on the list. And Ford more than doubled.

Many smaller companies on the Market Value 500 list did even better. A clutch of them more than tripled, including Federal National Mortgage, Mary Kay Cosmetics, USAir Group and Payless Cashways. More than a score at least doubled, including MCI Communications, Humana, R.H. Macy, Gould, Toys 'R' Us, Lockheed, UAL, AMR, Walgreen, Sysco, Tandon, Great Western Financial, E-Systems, Lowe's Cos., Sensormatic Electronics, Food Town Stores, Mercantile Stores, Advanced Micro Devices, Banc One, Trans World, American Stores, Clorox, Varian Associates, American Greetings, SCOA Industries and Paine Webber.

There were some orphans at this feast, of course, not all of them oil companies. Altogether, 123 of the 500 companies on last year's list lost market value in 1982, and 51 of them dropped completely off, to be supplanted by some of those big gainers, as well as such companies as the new Norfolk Southern Corp., CIGNA, AMR and Walgreen.

These market value figures were calculated from closing prices on Dec. 31, 1982. The Dow Jones industrial average that day closed at 1046.54 and since then has edged above 1150. So how much steam is left in the big bull market? That's impossible to predict, but it's worth noting that, in historical terms, the market had a long way to come back: That $1.072 trillion total means the Market Value 500 had not done too much more than pull even with the last trading day of 1980.

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The Forbes Market Value 500

Rank 1982	Rank 1981	Company	Market value ($000,000)	% change over 1981
6	9	Eastman Kodak	14,233	23.1
7	4	Standard Oil Ind	11,614	–24.4
8	6	Shell Oil	11,434	–15.9
9	5	Standard Oil Calif	10,919	–25.4
10	25	Sears, Roebuck	10,586	88.7
11	10	Atlantic Richfield	10,353	–8.4
12	11	Mobil	10,204	–0.6
13	16	Procter & Gamble	9,820	47.3
14	15	Johnson & Johnson	9,385	35.1
15	33	Hewlett-Packard	9,161	88.5
16	19	Minn Mining & Mfg	8,842	38.1
17	12	Standard Oil Ohio	8,809	–13.7
18	13	E I du Pont	8,486	–2.8
19	14	Texaco	8,034	–6.0
20	23	Philip Morris	7,554	23.6
21	27	GTE	7,491	41.3
22	38	Coca-Cola	7,058	64.3
23	24	American Home Prod	6,975	23.2
24	20	Merck	6,257	–0.3
25	40	American Express	6,135	49.5
26	31	R J Reynolds Inds	5,742	16.8
27	36	SmithKline Beckman	5,721	26.8
28	34	Digital Equipment	5,554	17.3
29	29	Union Pacific	5,373	7.2
30	41	Pfizer	5,301	32.8
31	49	Tandy	5,297	51.7
32	17	Gulf Oil	5,150	–21.4
33	30	Dow Chemical	5,024	1.1
34	21	Phillips Petroleum	4,996	–19.0
35	54	Abbott Laboratories	4,732	43.1
36	90	Ford Motor	4,681	132.2
37	18	Union Oil California	4,623	–29.2
38	44	Weyerhaeuser	4,594	24.2
39	43	American Intl Group	4,558	22.7
40	47	Bristol-Myers	4,545	28.7
41	37	Tenneco	4,413	2.0
42	39	Eli Lilly	4,361	2.5
43	22	Halliburton	4,177	–32.1
44	42	Intl Tel & Tel	4,162	7.4
45	59	Emerson Electric	4,148	43.0
46	55	Citicorp	4,135	30.7
47	63	Pacific Gas & Elec	4,001	47.1
48	134	MCI Communications	3,917	140.6
49	28	Getty Oil	3,838	–27.6
50	56	Raytheon	3,777	20.1
51	73	Commonwlth Edison	3,756	54.2
52	61	Dart & Kraft	3,750	35.4
53	95	Wang Laboratories	3,712	86.9
54	48	Union Carbide	3,709	5.3
55	26	Sun Company	3,706	–31.9
56	35	Superior Oil	3,662	–22.0
57	46	Aetna Life & Cas	3,619	2.5
58	66	McDonald's	3,618	37.6
59	92	J C Penney	3,553	77.1
60	32	Caterpillar Tractor	3,542	–27.2
61	■	Norfolk Southern	3,438	NA
62	116	Hospital Corp of Am	3,424	91.5
63	76	Baxter Travenol Labs	3,412	44.4
64	122	Phibro-Salomon	3,409	92.5
65	84	Westinghouse Elec	3,399	56.3
66	70	So Calif Edison	3,396	34.8
67	101	Gannett	3,376	76.2
68	163	Wal-Mart Stores	3,352	143.5
69	53	PepsiCo	3,338	0.2
70	111	Motorola	3,331	82.8
71	85	Boeing	3,272	50.7
72	78	Southern Company	3,263	42.4
73	71	Rockwell Intl	3,259	30.9
74	■	CIGNA	3,251	NA
75	52	Texas Oil & Gas	3,241	–2.8
76	104	Texas Instruments	3,184	67.7
77	50	Xerox	3,166	–7.5
78	106	Anheuser-Busch Cos	3,115	66.5
79	62	Monsanto	3,096	11.8
80	86	United Technologies	3,075	42.0
81	67	American Elec Power	3,050	16.4
82	57	BankAmerica	2,972	–5.2
83	103	Time Inc	2,959	55.4
84	113	Amer Hospital Supply	2,878	58.5
85	125	General Re	2,871	63.1
86	123	Dun & Bradstreet	2,773	57.2
87	98	K mart	2,739	40.3
88	180	Humana	2,686	106.2
89	88	Texas Utilities	2,683	29.9
90	87	J P Morgan	2,673	27.6
91	60	Teledyne	2,673	–6.6
92	94	Georgia-Pacific	2,660	33.6
93	153	Dayton-Hudson	2,656	84.5
94	89	Consolidated Edison	2,635	27.8
95	165	Goodyear	2,595	89.5
96	97	Nabisco Brands	2,557	30.2
97	91	American Brands	2,531	25.7
98	151	Waste Management	2,521	73.5
99	115	General Mills	2,465	37.7
100	102	Alcoa	2,447	28.2
101	109	AMP	2,445	33.8
102	112	TRW	2,389	31.2
103	99	International Paper	2,388	23.0
104	185	Merrill Lynch	2,341	82.7
105	124	Beatrice Foods	2,328	32.1
106	206	NCR	2,300	98.1
107	126	Federated Dept Stores	2,294	31.6
108	133	Squibb	2,277	39.1
109	120	Warner-Lambert	2,253	27.1
110	110	Duke Power	2,231	22.2
111	143	Pub Svc Elec & Gas	2,205	42.3
112	74	CSX	2,158	–10.4
113	64	United States Steel	2,144	–20.8
114	51	Warner Commun	2,140	–37.1
115	149	Phila Electric	2,138	44.6
116	141	Times Mirror	2,131	
117	130	Walt Disney	2,112	
118	142	Dow Jones	2,098	
119	147	Schering-Plough	2,096	
120	140	Middle South Utils	2,073	
121	138	G D Searle	2,065	
122	80	Litton Industries	2,055	
123	139	General Foods	2,054	
124	96	Amerada Hess	2,051	
125	127	Kellogg	2,035	
126	296	R H Macy	2,033	
127	107	Travelers	2,026	
128	129	CPC International	2,016	
129	75	Deere	1,997	
130	114	Avon Products	1,989	
131	93	Burlington Northern	1,966	
132	136	Honeywell	1,940	
133	177	H J Heinz	1,913	
134	79	Occidental Petroleum	1,893	
135	105	Santa Fe Industries	1,885	
136	183	McGraw-Hill	1,876	
137	83	W R Grace	1,848	
138	262	Melville	1,843	
139	162	RCA	1,834	
140	173	Florida Power & Lt	1,828	
141	72	Pennzoil	1,803	
142	108	Signal Cos	1,801	
143	184	PPG Industries	1,799	
144	175	General Dynamics	1,798	
145	181	Ralston Purina	1,772	
146	174	CBS	1,771	
147	154	Burroughs	1,762	
148	265	Delta Air Lines	1,759	
149	257	Intel	1,758	
150	207	Long Island Lighting	1,722	
151	192	Apple Computer	1,722	
152	190	Va Electric & Power	1,718	
153	132	United Telecom	1,699	
154	258	MCA	1,690	
155	158	American Cyanamid	1,681	
156	261	Amer Broadcasting	1,671	
157	118	Chase Manhattan	1,662	
158	152	Kimberly-Clark	1,661	
159	157	Archer Danls Midland	1,639	
160	297	Genuine Parts	1,636	
161	320	Gould	1,633	
162	189	Federal Express	1,624	
163	170	Continental Corp	1,620	
164	235	Carnation	1,619	
165	210	McDonnell Douglas	1,618	
166	223	Chesebrough-Pond's	1,616	
167	264	Knight-Ridder News	1,615	
168	219	Loews	1,612	
169	164	Colgate-Palmolive	1,608	
170	172	Houston Industries	1,604	

■ Not on 500 list in 1981. NA: not available

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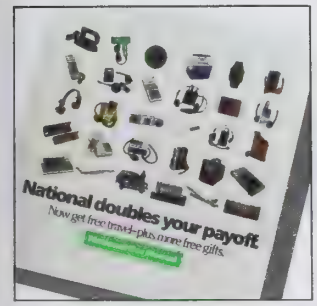

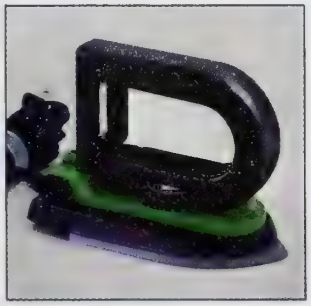

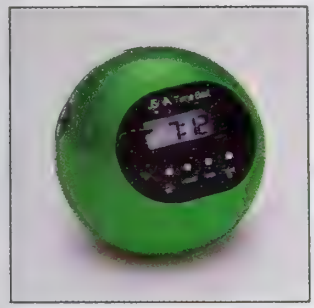

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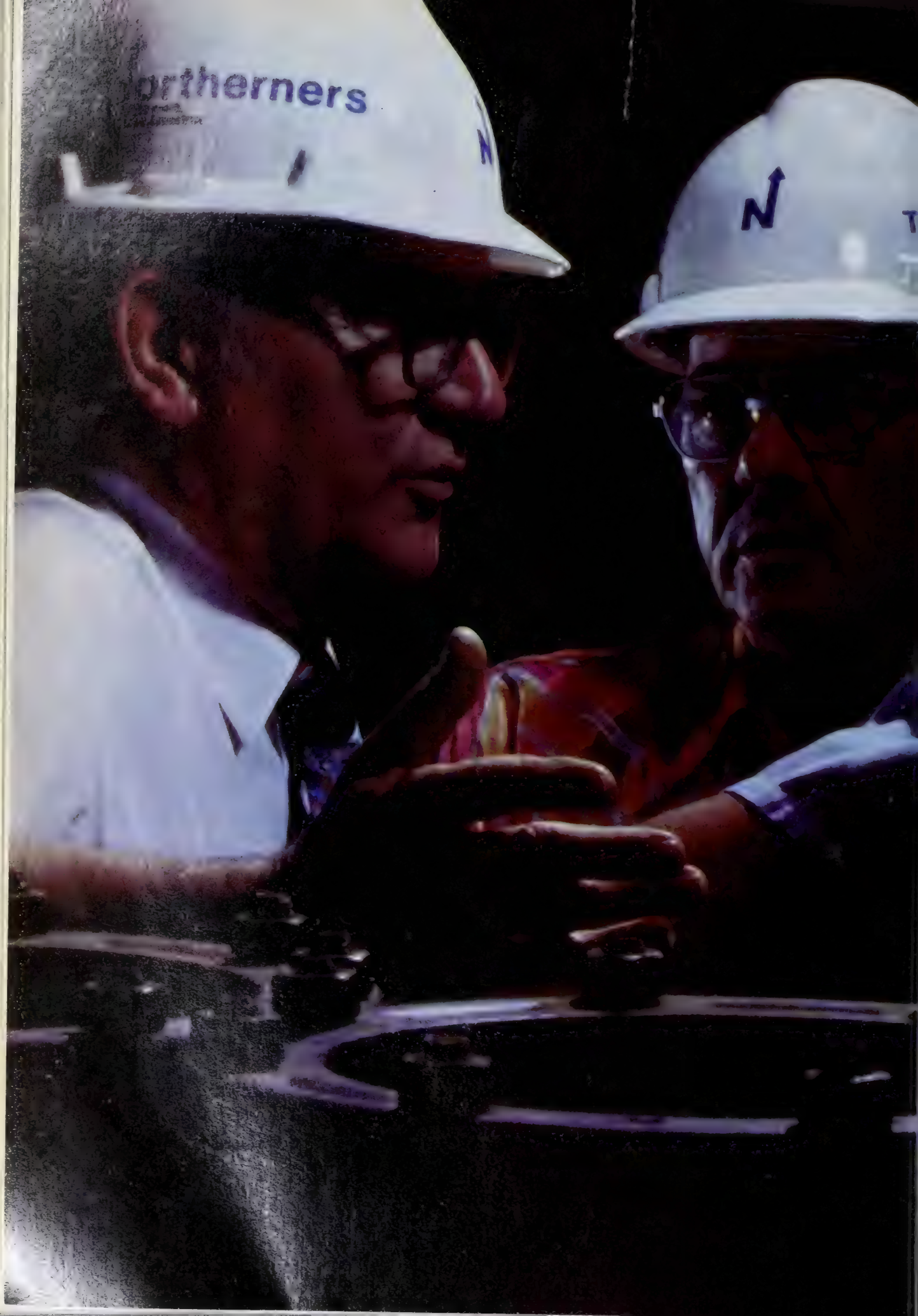
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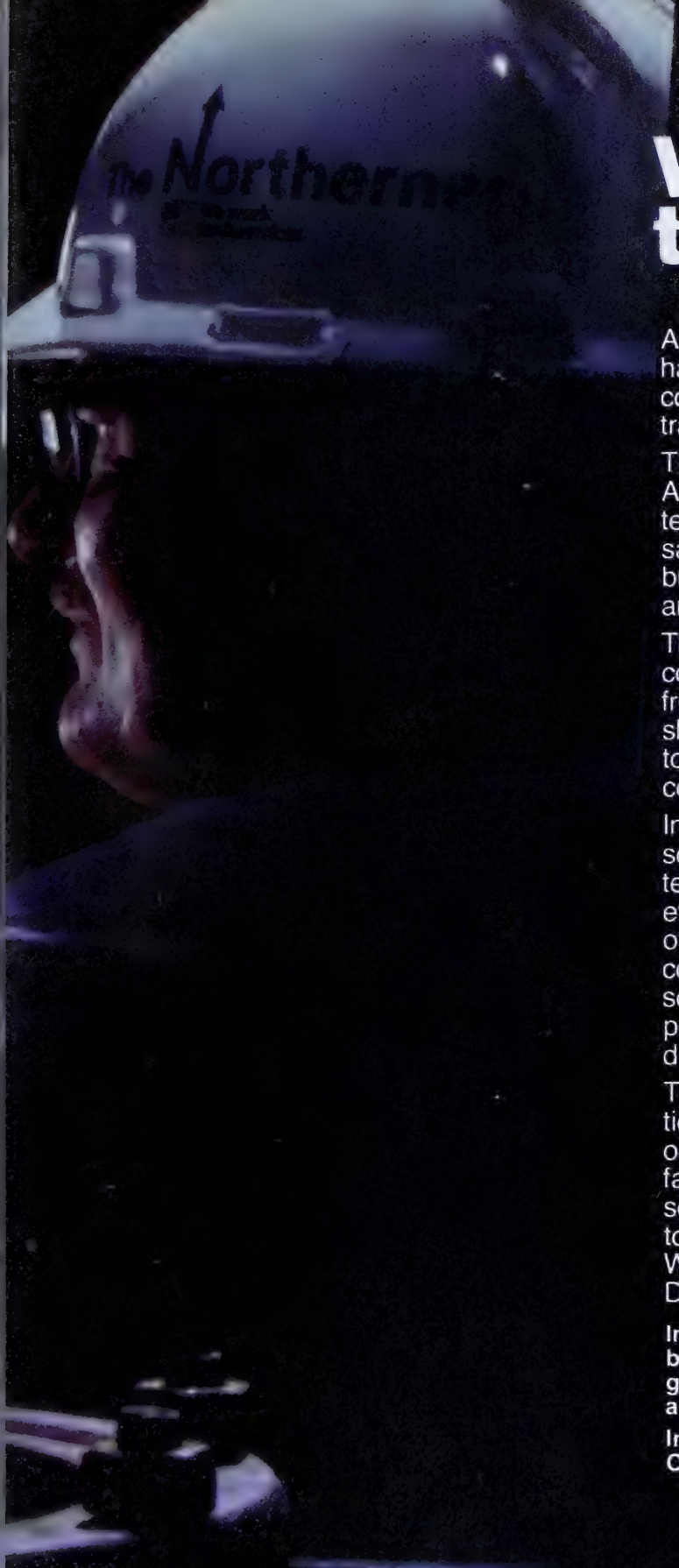

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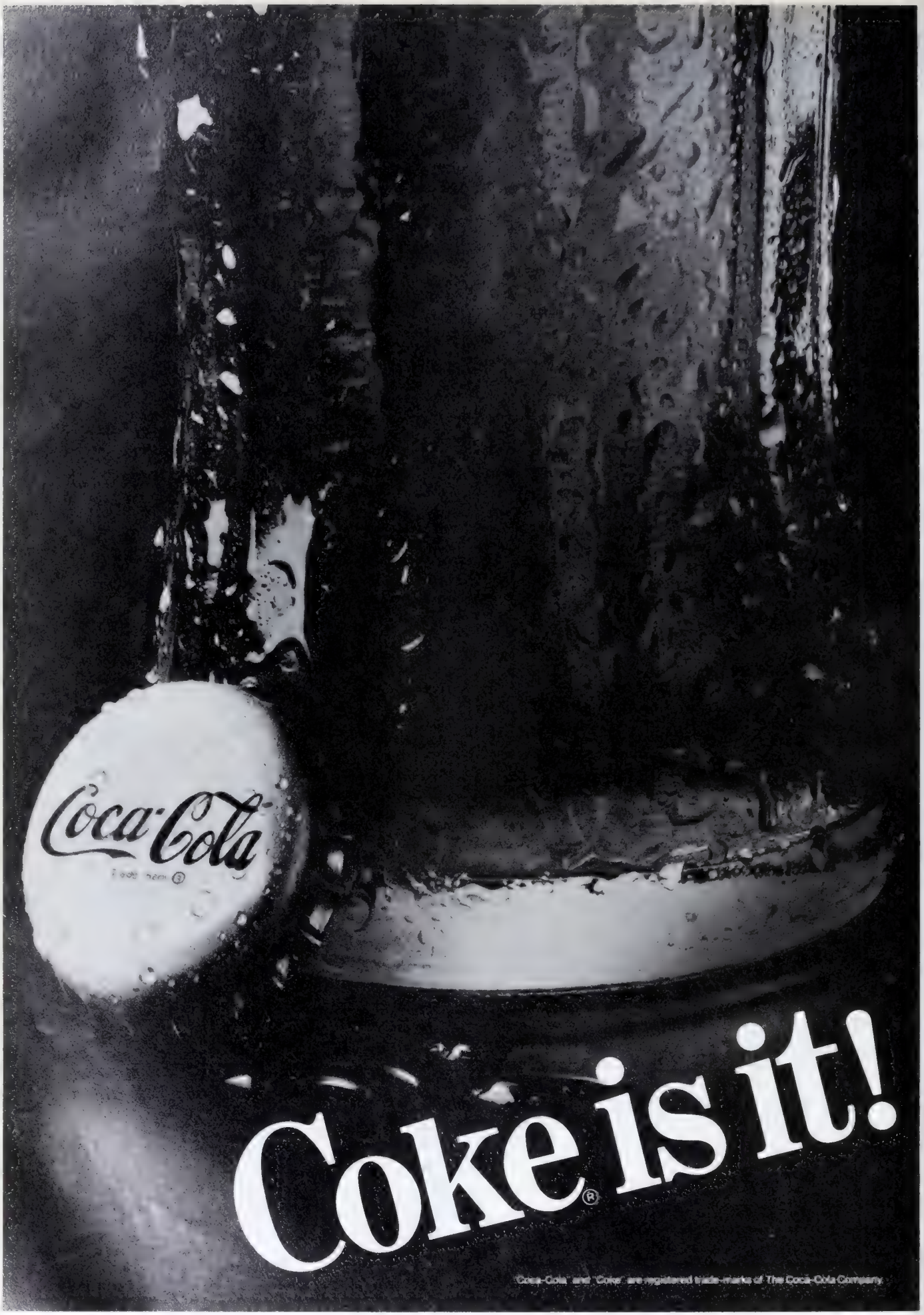
The Forbes Market Value 500

Rank 2	1981	Company	Market value ($000,000)	% change over 1981
	473	Fedl Natl Mortgage	1,603	219.1
	217	Levi Strauss	1,601	42.4
	277	Whirlpool	1,594	73.2
	224	Borg-Warner	1,582	43.2
	268	Capital Cities Commun	1,577	64.1
	69	Baker International	1,567	–39.5
	68	Dresser Industries	1,559	–40.3
	276	Campbell Soup	1,559	68.9
	166	General Instrument	1,555	14.0
	273	Marriott	1,553	65.5
	220	Arizona Public Serv	1,533	37.3
	77	Fluor	1,529	–34.8
	144	Sperry	1,526	1.2
	275	Masco	1,522	63.4
	100	Kerr-McGee	1,517	–21.7
	215	Central & South West	1,516	34.0
	171	Texas Eastern	1,500	11.9
	319	Natl Medical Entrprs	1,499	87.9
	205	Newmont Mining	1,493	28.1
	145	Transamerica	1,472	–1.8
	195	Union Camp	1,467	21.6
	239	Niagara Mohawk Pwr	1,466	41.1
	230	Detroit Edison	1,462	35.2
	119	Houston Natural Gas	1,458	–18.2
	191	Mfrs Hanover	1,454	18.2
	194	Marsh & McLennan	1,443	18.2
	411	Toys "R" Us	1,429	133.6
	58	AMAX	1,427	–52.2
	■	Chrysler	1,411	471.5
	135	Upjohn	1,402	–13.5
	272	Corning Glass Works	1,396	47.3
	255	Penn Power & Light	1,396	39.4
	241	Consumers Power	1,387	34.4
	178	Control Data	1,380	5.6
	250	Gillette	1,370	34.9
	168	Sterling Drug	1,368	1.4
	302	Holiday Inns	1,362	59.6
	353	May Dept Stores	1,361	87.5
	311	Borden	1,359	65.6
	278	Ohio Edison	1,345	47.1
	137	Diamond Shamrock	1,327	–16.8
	437	Lockheed	1,317	133.3
	294	Consolidated Foods	1,311	50.7
	246	St Paul Cos	1,308	27.8
	203	USF&G	1,307	11.9
	229	Champion Intl	1,305	20.4
	376	Electronic Data Sys	1,302	89.4
	202	Gulf & Western Inds	1,287	10.0
	159	First Interstate Bancp	1,280	–7.6
	226	Fort Howard Paper	1,270	16.4
	305	Auto Data Processing	1,265	49.3
	212	Carolina Pwr & Lt	1,265	11.3
	238	Dana	1,264	20.6
	188	InterFirst	1,261	2.1
	234	General Signal	1,259	17.6

Rank 1982	1981	Company	Market value ($000,000)	% change over 1981
226	306	Amer Medical Intl	1,240	46.6
227	267	Hercules	1,232	28.1
228	254	American General	1,224	22.1
229	81	Cooper Industries	1,223	–45.9
230	82	Hughes Tool	1,221	–44.7
231	313	Cleveland Elec Illum	1,220	49.4
232	208	Perkin-Elmer	1,218	6.1
233	247	Cox Communications	1,212	18.8
234	300	Public Service Ind	1,206	40.9
235	228	Farmers Group	1,197	10.2
236	373	Safeway Stores	1,196	72.8
237	251	Hilton Hotels	1,194	17.9
238	200	Texas Commerce Bshs	1,189	0.3
239	161	InterNorth	1,183	–14.3
240	283	Pacific Pwr & Lt	1,172	29.1
241	182	Harris Corp	1,165	–9.5
242	315	Union Electric	1,161	42.8
243	256	Nalco Chemical	1,152	15.9
244	339	Roadway Services	1,145	50.8
245	131	Freeport-McMoran	1,143	–30.9
246	328	Northrop	1,142	46.1
247	148	Allied Corp	1,141	–22.9
248	196	El Paso	1,135	–5.8
249	65	NL Industries	1,135	–57.0
250	364	R R Donnelley & Sons	1,132	58.8
251	341	Allegheny Power	1,130	49.7
252	340	Winn-Dixie Stores	1,125	48.2
253	310	Illinois Power	1,113	34.6
254	233	Continental Group	1,109	3.3
255	351	Kroger	1,102	51.5
256	361	Household Intl	1,102	53.7
257	244	Tektronix	1,095	6.6
258	242	Continental Telecom	1,092	6.2
259	201	Dover	1,090	–7.7
260	146	Panhandle Eastern	1,087	–27.2
261	193	Combustion Eng	1,086	–11.1
262	370	Prime Computer	1,086	55.2
263	299	Pillsbury	1,085	26.4
264	358	Northeast Utilities	1,085	50.5
265	231	Air Prods & Chems	1,083	0.6
266	336	City Investing	1,081	41.9
267	425	Ryder System	1,076	81.8
268	327	Baltimore Gas & Elec	1,074	37.2
269	121	Armco	1,073	–39.4
270	160	SONAT	1,072	–22.5
271	406	Western Union	1,071	72.3
272	237	Revlon	1,070	1.7
273	318	Utah Power & Light	1,067	33.7
274	404	Browning-Ferris Inds	1,059	69.4
275	288	Bankers Trust NY	1,047	18.0
276	280	Boise Cascade	1,041	14.0
277	308	FMC	1,038	24.3
278	213	Security Pacific	1,038	–8.6
279	374	Owens-Corning Fbrgls	1,037	50.4
280	218	Columbia Gas System	1,034	–7.8

Rank 1982	1981	Company	Market value ($000,000)	% change over 1981
281	325	Avnet	1,030	30.7
282	291	Chemical New York	1,027	16.3
283	260	Stauffer Chemical	1,025	4.6
284	216	Southern Pacific	1,019	–9.6
285	428	Northwest Airlines	1,019	74.2
286	362	Intl Flavors & Frag	1,010	41.6
287	289	Centel	1,010	14.1
288	326	Rohm & Haas	1,006	27.9
289	359	Gulf States Utils	990	37.7
290	488	UAL	985	101.7
291	402	Homestake Mining	972	55.3
292	347	Safeco	972	30.3
293	245	Tandem Computers	965	–5.9
294	169	ENSERCH	958	–28.8
295	197	Big Three Industries	955	–20.4
296	360	Super Valu Stores	953	32.6
297	253	Consol Natural Gas	951	–5.3
298	330	Square D	947	21.6
299	259	M/A-Com	941	–4.2
300	304	Lincoln National	940	10.5
301	357	Firestone	933	29.4
302	344	Southland	933	24.1
303	414	Capital Holding	926	52.4
304	392	Deluxe Check Printers	923	42.8
305	422	Louisiana-Pacific	922	54.4
306	■	AMR	922	191.3
307	295	Eaton	921	5.8
308	281	Jack Eckerd	920	1.0
309	443	ROLM	908	63.3
310	366	No States Power	907	28.2
311	282	Brown-Forman Dist	903	–0.7
312	387	Lucky Stores	885	34.4
313	438	Hershey Foods	883	56.6
314	382	Interco	880	31.2
315	441	GEICO	880	57.4
316	285	Arkla	880	–2.1
317	266	Becton, Dickinson	875	–10.0
318	390	Engelhard	866	33.2
319	379	Scott Paper	864	26.6
320	■	Walgreen	859	136.6
321	484	N Y State Elec & Gas	858	75.4
322	420	So New England Tel	856	42.7
323	211	Murphy Oil	852	–25.1
324	301	Intl Minerals & Chem	852	–0.3
325	372	Quaker Oats	848	21.8
326	187	Natomas	847	–32.0
327	287	Computervision	846	–4.6
328	403	Esmark	846	35.1
329	416	Medtronic	845	40.5
330	292	Penn Central	844	–4.0
331	478	NIKE	841	69.8
332	249	Bethlehem Steel	841	–17.2
333	232	St Regis Paper	840	–21.8
334	447	United States Gypsum	839	52.0
335	393	Potomac Elec Power	838	30.4

■ Not on 500 list in 1981


Coca-Cola
Coke is it!®
"Coca-Cola" and "Coke" are registered trade-marks of The Coca-Cola Company.

The Forbes Market Value 500

Rank 1982	Rank 1981	Company	Market value ($000,000)	% change over 1981
440		EG&G	835	49.0
498		Morton Thiokol	834	80.2
427		Public Service N M	833	42.2
467		San Diego Gas & Elec	833	60.5
479		Revco D S	830	68.3
398		Metromedia	828	30.3
■		Sysco	820	112.7
317		American Standard	820	1.4
395		Public Service Colo	817	27.7
303		RepublicBank	816	–4.3
176		Continental Illinois	814	–38.0
284		Textron	812	–10.4
290		Am Natural Resources	808	–8.6
335		Sundstrand	805	5.4
221		Louisiana Land	802	–28.1
375		Burlington Inds	799	16.2
383		ASARCO	797	18.9
332		National Distillers	796	3.2
■		Tandon	795	157.3
457		Allied Stores	794	50.2
450		F W Woolworth	792	45.1
329		Crown Zellerbach	791	1.5
439		New England Electric	787	39.8
419		Duquesne Light	786	30.9
167		Mesa Petroleum	785	–42.3
225		Ingersoll-Rand	783	–28.9
381		Polaroid	782	16.1
■		Washington Post	781	78.4
452		A C Nielsen	777	43.9
489		Gulf United	775	59.4
355		Pacific Lighting	772	6.8
309		Ashland Oil	771	–7.1
■		Albertson's	769	95.2
460		W W Grainger	768	45.5
446		Berkshire Hathaway	765	38.4
396		Black & Decker	763	19.8
298		Owens-Illinois	761	–12.3
222		Pioneer	761	–31.6
■		Gt Western Financial	760	131.9
316		MidCon	760	–6.0
431		Wisconsin Elec Pwr	756	31.1
209		Utd Energy Resources	755	–34.3
451		Cincinnati G & E	754	38.8
371		Greyhound	751	7.5
312		Pioneer Hi-Bred Intl	750	–8.3
389		Combined Internatl	749	15.1
■		Pitney Bowes	746	84.3
356		Mellon National	746	3.3
384		PACCAR	746	11.7
486		Oklahoma Gas & Elec	744	52.3
338		Colt Industries	743	–2.4
179		Martin Marietta	740	–43.3
492		New York Times	740	53.8
442		No Indiana Pub Svc	739	32.8
333		First Chicago	738	–3.9
391	252	Mitchell Energy & Dev	737	–27.2
392	■	Mary Kay Cosmetics	735	209.0
393	271	Lubrizol	735	–22.5
394	434	Florida Progress	728	27.6
395	204	Storage Technology	725	–37.9
396	■	E-Systems	724	106.9
397	■	Key Pharmaceuticals	723	125.6
398	286	Petrolane	722	–18.8
399	117	Northwest Industries	708	–60.3
400	263	First City Bancorp	707	–27.6
401	477	Genl Tire & Rubber	706	42.2
402	293	Celanese	705	–19.2
403	472	Comsat	702	38.2
404	378	Allied Bancshares	702	2.7
405	■	Limited	701	257.5
406	409	Westvaco	695	13.1
407	■	Lowe's Companies	693	178.1
408	354	NICOR	692	–4.2
409	■	Sensormatic Electrns	690	107.4
410	■	Food Town Stores	685	107.9
411	■	Mercantile Stores	682	107.2
412	459	Consol Freightways	674	27.7
413	■	Convergent Technolgs	673	NA
414	426	Foremost-McKesson	673	14.8
415	■	H F Ahmanson	671	87.1
416	345	CBI Industries	669	–11.0
417	380	E F Hutton Group	666	–1.8
418	321	Cabot	664	–16.1
419	400	Northwest Bancorp	664	5.6
420	199	Southland Royalty	664	–44.3
421	■	Advanced Micro Devcs	662	137.2
422	■	Shared Medical Systm	660	47.9
423	■	USAir Group	659	225.2
424	497	Stanley Works	659	42.0
425	■	So Carolina E & G	657	47.6
426	■	Banc One	655	117.7
427	455	North Amer Philips	654	22.7
428	388	Kaiser Alum & Chem	652	–0.7
429	■	Rite Aid	650	61.6
430	307	MAPCO	650	–22.7
431	■	VF	649	96.9
432	■	U S Tobacco	648	49.6
433	■	Pall	648	54.2
434	■	Diebold	646	59.0
435	454	Mercantile Texas	646	21.0
436	417	McGraw-Edison	645	7.3
437	198	SEDCO	644	–46.3
438	■	Avco	641	51.7
439	391	Richardson-Vicks	641	–1.2
440	240	Smith International	640	–38.4
441	423	American Petrofina	639	7.1
442	■	Trans World	638	114.2
443	■	American Stores	638	119.5
444	155	Cameron Iron Works	637	–55.3
445	346	Noble Affiliates	635	–14.8
446	481	Alexander & Alexander	635	28.9
447	405	Baldwin-United	635	1.9
448	410	Wells Fargo	634	3.3
449	500	Dayton Power & Light	633	37.9
450	445	Jefferson-Pilot	633	14.2
451	453	Raychem	627	16.9
452	475	Portland Genl Elec	621	24.5
453	407	Vulcan Materials	618	–0.3
454	430	Bank of Boston	613	5.6
455	■	Armstrong World Inds	613	49.6
456	350	Phelps Dodge	612	–16.3
457	436	Chubb	611	8.0
458	■	Varian Associates	611	152.3
459	■	Servicemaster Inds	611	49.4
460	342	Bally Manufacturing	610	–18.9
461	■	Jim Walter	610	90.5
462	227	Transco Energy	607	–44.2
463	■	Pic'n'Save	606	142.2
464	■	Associated Dry Goods	602	81.1
465	■	Wendy's International	596	65.1
466	■	Southwest Airlines	595	98.0
467	■	Clorox	595	121.2
468	■	Brown Group	595	93.0
469	■	Payless Cashways	592	213.6
470	■	Southwestern Pub Svc	590	40.3
471	482	Inland Steel	589	19.9
472	■	PHH Group	588	61.8
473	■	American Greetings	586	112.4
474	■	United States Shoe	586	65.8
475	424	Gt Northern Nekoosa	585	–1.8
476	■	Puget Sound Pwr & Lt	582	41.0
477	■	Jewel Cos	581	32.1
478	■	Tele-Communications	580	52.0
479	■	Willamette Inds	575	29.1
480	493	Lear Siegler	575	21.0
481	385	American Can	574	–13.7
482	352	Timken	573	–21.2
483	429	Cincinnati Milacron	572	–1.9
484	■	Premier Industrial	572	32.5
485	■	Grumman	568	97.3
486	■	Beverly Enterprises	567	95.5
487	■	B F Goodrich	567	44.3
488	363	Norton	567	–20.5
489	■	General Cinema	566	46.7
490	■	Tampax	565	58.4
491	413	Norton Simon	565	–7.3
492	397	Belco Petroleum	564	–11.4
493	■	Alco Standard	564	55.2
494	■	Emhart	563	46.0
495	■	Potlatch	563	23.6
496	476	Cray Research	561	12.5
497	■	Tucson Electric Pwr	560	41.2
498	■	SCOA Industries	559	177.6
499	■	Paine Webber	558	132.2
500	469	Commerce Clearing	558	8.3

Not on 500 list in 1981. NA: not available.

SUMMARY

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net ($
374	253	35	86	Abbott Laboratories (Dec)	2,566,909	2,602,447	4,731,530	28
■	■	421	■	Advanced Micro Devices (Mar)	243,523	281,580	661,994	
10	27	57	35	Aetna Life & Casualty (Dec)	44,210,828	14,164,375	3,619,240	52
452	■	■	■	Affiliated Bankshares of Colorado (Dec)	2,058,184	242,532	112,032	2
50	315	415	■	H F Ahmanson (Dec)	16,863,863	2,014,906	670,856	–4
435	383	265	272	Air Products & Chemicals (Sept)	2,169,505	1,568,916	1,082,520	10
■	153	368	432	Albertson's (Jan)	831,079	3,940,117	769,466	5
■	236	493	419	Alco Standard (Sept)	920,880	2,851,999	563,520	6
■	■	446	■	Alexander & Alexander Services (Dec)	1,456,519	573,254	635,136	1
210	427	■	434	Alleghany (Dec)	4,402,833	1,349,742	415,758	5
447	237	■	494	Allegheny International (Dec)	2,081,120	2,838,620	314,123	4
269	348	251	174	Allegheny Power System (Dec)	3,420,827	1,751,811	1,130,191	16
136	■	404	334	Allied Bancshares (Dec)	6,010,632	717,930	701,581	8
125	77	247	92	Allied Corp (Dec)	6,272,000	6,167,000	1,141,219	27
421	197	355	306	Allied Stores (Jan)	2,283,252	3,249,363	793,801	9
■	370	■	■	Allis-Chalmers (Dec)	1,204,421	1,609,992	122,655	–20
138	118	100	■	Aluminum Company of America (Dec)	5,989,500	4,647,630	2,446,675	–
173	270	198	■	AMAX (Dec)	5,089,600	2,415,500	1,426,583	–39
133	54	124	166	Amerada Hess (Dec)	6,145,303	8,342,570	2,051,250	16
382	■	■	■	American Bancorporation (Dec)	2,471,186	271,487	113,613	2
12	124	97	55	[1]American Brands (Dec)	6,255,882	4,563,496	2,530,694	38
482	250	156	175	American Broadcasting Cos (Dec)	1,922,292	2,640,753	1,670,895	16
361	147	481	■	American Can (Dec)	2,647,300	4,063,400	574,213	–13
315	184	155	225	American Cyanamid (Dec)	2,997,405	3,453,674	1,680,858	13

■ Not on 500 list.

[1]Figures include unconsolidated subsidiaries.

A Summary of the 500s' Rankings

On these and the following pages, a summary of all four Forbes 500 rosters. The companies are listed alphabetically. We give their rankings in assets, sales, market value and net profits, the actual figures reported that determined those rankings, the number of their employees and the names of their chief executives.

Cash flow ($000)	Share data: 1982 — Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
09,833	122,104	NYSE	ABT	2.37	0.81	38¾	North Chicago, Ill	31.8	**Robert A Schoellhorn**
24,992	26,348	NYSE	AMD	0.37	none	25⅛	Sunnyvale, Cal	9.9	**Walter J Sanders III**
50,300	99,498	NYSE	AET	5.80	2.47	36⅜	Hartford, Conn	46.7	**John H Filer**
36,128	6,224	NASDAQ	AFBK	2.98	1.00	18	Boulder, Colo	2.2	**Leo Hill**
88,675	24,175	NYSE	AHM	–1.88	0.75	27¾	Los Angeles, Cal	4.7	**William H Ahmanson**
10,746	29,760	NYSE	APD	3.68	0.80	36⅜	Allentown, Pa	17.6	**Edward Donley**
13,288	16,285	NYSE	ABS	3.81	0.97	47¼	Boise, Ida	31.0	**Warren E McCain**
86,339	18,784	NYSE	ASN	2.95	1.09	30	Valley Forge, Pa	17.9	**Ray B Mundt**
77,389	25,030	NYSE	AAL	0.57	1.94	25⅜	New York, NY	9.0	**John A Bogardus Jr**
35,481	8,378	NYSE	Y	5.80	1.08	49⅝	New York, NY	4.6	**Fred M Kirby**
80,274	11,269	NYSE	AG	0.21	1.40	27⅞	Pittsburgh, Pa	46.7	**Robert J Buckley**
18,958	47,587	NYSE	AYP	3.41	2.28	23¾	New York, NY	5.8	**Charles B Finch**
30,616	29,728	NASDAQ	ALBN	2.78	0.73	23⅝	Houston, Tex	3.5	**Gerald H Smith**
35,000	35,250	NYSE	ALD	6.22	2.40	32⅜	Morris Township, NJ	51.3	**Edward L Hennessey Jr**
75,883	20,821	NYSE	ALS	4.41	1.80	38⅛	New York, NY	65.0	**Thomas M Macioce**
65,034	12,580	NYSE	AH	–17.24	none	9¾	West Allis, Wisc	21.7	**David C Scott**
87,700	78,925	NYSE	AA	–0.15	1.65	31	Pittsburgh, Pa	40.9	**Charles W Parry**
92,000	65,590	NYSE	AMX	–6.53	0.85	21¾	Greenwich, Conn	17.1	**Pierre Gousseland**
66,778	82,050	NYSE	AHC	2.00	1.10	25	New York, NY	8.9	**Philip Kramer**
27,508	9,089	NASDAQ	APEN	2.53	1.00	12½	Reading, Pa	1.9	**Samuel A McCullough**
45,732	55,165	NYSE	AMB	6.55	3.50	45⅞	New York, NY	50.1	**Edward W Whittemore**
45,428	28,996	NYSE	ABC	5.54	1.60	57⅝	New York, NY	13.7	**Leonard H Goldenson**
91,500	18,598	NYSE	AC	–7.31	2.90	30⅞	Greenwich, Conn	36.8	**William S Woodside**
07,505	48,370	NYSE	ACY	2.74	1.75	34¾	Wayne, NJ	41.0	**George J Sella**

All share data adjusted for stock splits and stock dividends through May 9, 1983

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net ($
62	139	81	65	American Electric Power (Dec)	12,223,786	4,179,955	3,049,539	335
23	55	25	30	American Express (Dec)	28,311,000	8,093,000	6,135,183	581
311	■	■	■	American Fletcher (Dec)	3,038,369	347,978	91,580	18
56	228	228	135	American General (Dec)	13,275,827	2,913,211	1,224,231	202
■	■	473	■	American Greetings (Feb)	580,675	742,683	585,748	44
335	122	23	31	American Home Products (Dec)	2,831,781	4,582,096	6,974,646	560
460	220	84	112	American Hospital Supply (Dec)	2,018,400	2,968,400	2,877,875	229
85	177	39	48	American International Group (Dec)	9,119,928	3,563,172	4,558,363	412
■	477	226	349	American Medical International (Aug)	1,219,817	1,154,689	1,240,390	79
■	233	■	■	American Motors (Dec)	1,607,319	2,878,416	377,632	–153
292	■	■	392	American National Insurance (Dec)	3,222,122	723,970	441,854	69
227	210	348	172	American Natural Resources (Dec)	3,980,303	3,097,159	807,886	161
■	291	441	453	American Petrofina (Dec)	1,166,022	2,242,445	638,793	54
417	■	■	■	American Savings & Loan Assn of Fla (Sept)	2,305,568	287,931	57,462	–13
271	■	■	■	American Security (Dec)	3,406,894	368,685	180,222	28
■	303	343	■	American Standard (Dec)	1,519,930	2,124,519	819,570	35
■	60	443	307	American Stores (Jan)	1,444,367	7,507,772	637,585	90
1	2	2	1	American Telephone & Telegraph (Dec)	148,185,500	65,093,000	53,225,234	6,992
145	■	■	418	AmeriTrust (Dec)	5,753,475	623,605	332,189	62
■	296	■	■	Amfac (Dec)	1,421,869	2,208,538	388,804	34
■	452	101	250	AMP (Dec)	1,076,322	1,243,438	2,445,211	118
233	140	306	■	[2]AMR (Dec)	3,896,813	4,176,974	921,715	–19
285	■	■	■	AmSouth Bancorporation (Dec)	3,255,458	373,768	172,443	31
■	416	■	■	Amstar (June)	666,619	1,421,912	228,763	40
■	357	■	446	Anderson, Clayton (June)	909,192	1,680,723	328,998	55
232	123	78	87	Anheuser-Busch Cos (Dec)	3,902,847	4,576,575	3,114,834	287
■	■	151	421	Apple Computer (Sept)	357,787	583,061	1,722,234	61
■	239	■	■	ARA Services (Sept)	1,205,787	2,805,633	411,411	38
430	167	159	187	Archer Daniels Midland (June)	2,194,819	3,712,977	1,638,773	154
414	■	■	■	[3]Arizona Bancwest (Dec)	2,337,246	274,782	131,953	16
236	■	181	111	Arizona Public Service (Dec)	3,888,536	1,064,453	1,533,041	23
■	437	316	289	Arkla (Dec)	1,581,007	1,296,584	879,673	95
130	75	269	■	[1]Armco (Dec)	6,207,800	6,278,500	1,073,447	–354
■	442	455	■	Armstrong World Industries (Dec)	903,031	1,285,590	612,538	19
436	426	352	■	ASARCO (Dec)	2,153,064	1,350,695	796,627	–38
213	50	367	153	Ashland Oil (Sept)	4,210,481	8,864,669	770,994	180
■	203	464	352	Associated Dry Goods (Jan)	1,700,684	3,188,858	601,507	78
376	■	■	■	Atlantic Bancorp (Dec)	2,534,606	299,674	161,714	2
33	15	11	7	Atlantic Richfield (Dec)	21,632,775	26,462,150	10,353,378	1,676
■	■	221	435	Automatic Data Processing (June)	555,449	669,263	1,265,437	57
135	263	438	423	Avco (Nov)	6,037,660	2,459,292	641,474	60
■	495	281	388	Avnet (June)	623,099	1,112,039	1,029,900	70
427	215	130	141	Avon Products (Dec)	2,233,200	3,000,800	1,988,863	196
381	258	176	102	Baker International (Sept)	2,482;382	2,535,102	1,567,215	248
89	173	447	495	Baldwin-United (Dec)	8,398,744[4]	3,598,000	634,942	46
■	447	460	305	Bally Manufacturing (Dec)	1,014,930	1,254,415	610,041	90
261	374	268	161	Baltimore Gas & Electric (Dec)	3,513,136	1,595,471	1,073,813	174
179	■	426	437	Banc One (Dec)	5,028,928	605,297	654,924	57
242	■	■	■	BanCal Tri-State (Dec)	3,839,364	520,921	95,815	[illegible]

■ Not on 500 list

[1]Figures include unconsolidated subsidiaries.
[2]Formerly American Airlines.
[3]Formerly Arizona Bank
[4]Assets as of 9/30/82.

A Summary of the 500s' Rankings

Cash flow (000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
3,936	171,805	NYSE	AEP	2.03	2.26	17¾	Columbus, Ohio	25.3	**Willis S White Jr**
2,000	127,315	NYSE	AXP	4.53	1.65	48¼	New York, NY	61.2	**James D Robinson III**
5,257	4,579	NASDAQ	AFLT	3.97	1.32	20	Indianapolis, Ind	2.4	**Frank E McKinney Jr**
3,800	22,108	NYSE	AGC	7.36	2.20	55⅜	Houston, Tex	11.2	**Harold S Hook**
4,580	31,033	NASDAQ	AGREA	1.54	0.59	18⅞	Cleveland, Ohio	17.0	**Irving I Stone**
3,692	155,858	NYSE	AHP	3.59	2.15	44¾	New York, NY	51.9	**John W Culligan**
5,300	71,500	NYSE	AHS	3.18	0.81	40¼	Evanston, Ill	31.5	**Karl D Bays**
1,680	72,126	NASDAQ	AIGR	5.61	0.37	63¼	New York, NY	23.2	**Maurice R Greenberg**
5,936	45,156	NYSE	AMI	1.69	0.39	27½	Beverly Hills, Cal	30.0	**Royce Diener**
0,929	57,001	NYSE	AMO	–2.85	none	6⅝	Southfield, Mich	23.0	**W Paul Tippett Jr**
2,749	28,974	NASDAQ	ANAT	2.38	0.78	15¼	Galveston, Tex	7.9	**Orson C Clay**
2,400	24,116	NYSE	ANR	6.77	2.96	33½	Detroit, Mich	11.6	**Arthur R Seder Jr**
2,232	10,827	ASE	API A	5.03	3.20	59	Dallas, Tex	2.6	**Richard I Galland**
5,411	5,606	NYSE	AAA	–2.54	none	10¼	Miami, Fla	0.9	**Morris N Broad**
3,360	7,356	NASDAQ	ASEC	3.93	1.30	24½	Washington, DC	1.4	**W Jarvis Moody**
7,425	27,319	NYSE	AST	1.30	2.20	30	New York, NY	42.6	**William A Marquard**
4,000	9,809	NYSE	ASC	8.07	0.95	65	Salt Lake City, Utah	62.0	**Lennie S Skaggs**
5,300	896,425	NYSE	T	8.06	5.40	59⅜	New York, NY	1,015.9	**Charles L Brown**
8,847	9,292	NASDAQ	AMTR	6.69	2.76	35¾	Cleveland, Ohio	4.2	**M Brock Weir**
5,065	14,954	NYSE	AMA	2.27	1.44	26	Honolulu, Haw	26.0	**Myron Du Bain**
5,700	35,893	NYSE	AMP	3.31	1.40	68⅛	Harrisburg, Pa	19.7	**Walter F Raab**
0,453	37,241	NYSE	AMR	–1.00	none	24¾	Dallas, Tex	41.6	**Albert V Casey**
8,115	7,457	NYSE	ASO	4.21	1.60	23⅛	Birmingham, Ala	3.6	**John W Woods**
4,938	9,105	NYSE	ASR	4.31	1.90	25⅛	New York, NY	8.7	**Howard B Wentz Jr**
4,135	12,299	NYSE	AYL	4.47	1.32	26¾	Houston, Tex	17.6	**Thomas J Barlow**
0,820	48,292	NYSE	BUD	5.97	1.38	64½	St Louis, Mo	20.2	**August A Busch III**
5,847	57,648	NASDAQ	AAPL	1.06	none	29⅞	Cupertino, Cal	2.9	**John Sculley**
9,871	11,508	NYSE	ARA	3.43	2.00	35¾	Philadelphia, Pa	115.0	**Joseph Neubauer**
1,800	76,222	NYSE	ADM	2.03	0.14	21½	Decatur, Ill	7.7	**Dwayne O Andreas**
9,998	8,312	NASDAQ	AZBW	2.23	0.77	15⅞	Phoenix, Ariz	2.2	**Donald B Tostenrud**
8,041	62,894	NYSE	AZP	3.30	2.40	24⅜	Phoenix, Ariz	6.6	**Keith L Turley**
4,824	50,267	NYSE	ALG	1.90	0.86	17½	Shreveport, La	5.2	**Edward Sheffield Nelson**
6,500	65,554	NYSE	AS	–5.56	1.50	16⅜	Middletown, Ohio	59.8	**Harry Holiday Jr**
7,609	24,749	NYSE	ACK	0.79	1.10	24¾	Lancaster, Pa	20.8	**Harry A Jensen**
6,803	27,352	NYSE	AR	–2.40	0.50	29⅛	New York, NY	10.9	**Ralph L Hennebach**
9,119	26,586	NYSE	ASH	5.29	2.40	29	Russell, Ky	32.5	**John R Hall**
3,304	13,517	NYSE	DG	4.31	1.90	44½	New York, NY	60.5	**William P Arnold**
6,215	5,259	NASDAQ	ABAN	4.05	1.16	30¾	Jacksonville, Fla	3.0	**Billy J Walker**
3,705	246,509	NYSE	ARC	6.61	2.40	42	Los Angeles, Cal	52.9	**William F Kieschnik**
4,323	34,201	NYSE	AUD	1.71	0.47	37	Clifton, NJ	14.5	**Josh S Weston**
4,192	22,607	NYSE	AV	2.58	1.20	28⅜	Greenwich, Conn	25.8	**Robert P Bauman**
4,440	34,330	NYSE	AVT	2.02	0.50	30	New York, NY	8.0	**Anthony R Hamilton**
4,100	74,350	NYSE	AVP	2.75	2.50	26¾	New York, NY	36.1	**David W Mitchell**
9,652	69,654	NYSE	BKO	3.60	0.84	22½	Orange, Cal	25.6	**Earnest H Clark Jr**
NA	20,482	NYSE	BDW	2.10	0.84	31	Cincinnati, Ohio	12.7	**Morley P Thompson**
2,656	26,098	NYSE	BLY	3.20	0.15	23⅜	Chicago, Ill	11.0	**Robert E Mullane**
9,971	37,350	NYSE	BGE	4.07	2.76	28¾	Baltimore, Md	9.0	**Bernard C Trueschler**
4,486	17,011	NASDAQ	BONE	3.60	1.17	38½	Columbus, Ohio	4.4	**John G McCoy**
6,830	4,761	NYSE	BNC	1.79	1.20	20⅛	San Francisco, Cal	3.2	**Chauncey E Schmidt**

share data adjusted for stock splits and stock dividends through May 9, 1983

Not available

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net ($
347	■	■	■	Banco Popular de Puerto Rico (Dec)	2,727,043	326,106	99,000	2
142	■	■	■	BancOhio (Dec)	5,822,355	661,062	132,578	2
320	■	■	■	Bancorp Hawaii (Dec)	2,971,295	361,739	167,540	2
43	241	454	239	[5]Bank of Boston (Dec)	18,267,397	2,745,262	612,664	12
176	■	■	■	[6]Bank of New England (Dec)	5,065,355	641,994	195,489	3
58	393	■	378	Bank of New York (Dec)	12,723,562	1,523,389	363,424	7
274	■	■	■	Bank of Virginia (Dec)	3,353,246	412,015	123,761	2
3	26	82	53	BankAmerica (Dec)	122,220,806	14,954,793	2,972,060	38
14	117	275	119	Bankers Trust New York (Dec)	40,427,059	4,676,789	1,046,702	22
114	■	■	440	Barnett Banks of Florida (Dec)	6,932,141	791,313	372,465	5
495	359	63	149	Baxter Travenol Laboratories (Dec)	1,792,710	1,671,445	3,412,034	18
251	■	■	■	BayBanks (Dec)	3,709,662	437,321	188,340	3
191	49	105	56	Beatrice Foods (Feb)	4,743,901	9,023,520	2,327,887	35
■	494	317	357	Becton, Dickinson (Sept)	1,089,615	1,113,921	874,863	7
■	■	492	278	Belco Petroleum (Dec)	871,300	344,367	564,496	10
129	311	■	■	[1]Beneficial Corp (Dec)	6,211,700	2,039,700	544,929	–3
■	■	370	■	Berkshire Hathaway (Dec)	1,485,624	462,358	764,925	3
■	381	■	■	Best Products (Jan)		1,581,650		2
199	101	332	■	Bethlehem Steel (Dec)	4,611,300	5,260,300	840,879	–1,46
■	■	486	■	Beverly Enterprises (Dec)	931,866	816,187	567,294	2
■	■	295	317	Big Three Industries (Dec)	1,055,313	767,785	954,900	8
■	472	371	■	Black & Decker Manufacturing (Sept)	995,329	1,160,233	763,226	–7
■	440	■	■	Blue Bell (Sept)	739,186	1,292,220	397,248	3
341	■	■	■	Boatmen's Bancshares (Dec)	2,757,872	258,332	99,089	2
100	48	71	84	Boeing (Dec)	7,593,000	9,035,000	3,271,986	29
358	229	276	■	Boise Cascade (Dec)	2,662,977	2,912,450	1,041,066	
370	144	209	170	Borden (Dec)	2,589,702	4,111,277	1,358,789	16
385	202	174	168	Borg-Warner (Dec)	2,462,600	3,195,300	1,582,077	16
479	■	■	424	Boston Edison (Dec)	1,929,940	1,056,267	381,290	6
342	172	40	59	Bristol-Myers (Dec)	2,756,235	3,599,864	4,545,226	34
478	■	■	■	Broadview Financial (Dec)	1,934,240	195,321	13,007	–2
■	■	■	499	Brooklyn Union Gas (Sept)	848,401	879,953	252,474	4
■	■	311	318	Brown-Forman Distillers (Apr)	575,134	578,099	903,010	8
■	421	468	426	Brown Group (Oct)	621,571	1,396,531	594,664	5
■	■	274	415	Browning-Ferris Industries (Sept)	666,673	714,945	1,059,341	6
■	■	■	145	Brunswick (Dec)	787,040	1,068,243	290,575	19
453	235	351	463	Burlington Industries (Sept)	2,049,008	2,876,205	798,560	5
143	137	131	88	Burlington Northern (Dec)	5,797,265	4,197,599	1,965,519	28
219	145	147	303	Burroughs (Dec)	4,123,123	4,095,291	1,761,683	9
■	377	418	314	Cabot (Sept)	1,319,114	1,587,658	664,222	8
217	■	■	■	California First Bank (Dec)	4,156,440	493,001	149,345	
■	482	444	192	Cameron Iron Works (June)	1,329,017	1,147,255	636,720	15
487	225	178	197	Campbell Soup (July)	1,865,519	2,944,779	1,558,884	14
■	■	175	287	Capital Cities Communications (Dec)	776,013	663,580	1,576,658	9
222	441	303	269	Capital Holding (Dec)	4,064,345	1,286,139	926,194	10
■	188	164	146	Carnation (Dec)	1,712,326	3,382,212	1,618,577	19
182	390	222	114	Carolina Power & Light (Dec)	4,950,955	1,538,165	1,264,953	22
485	213	■	479	Carter Hawley Hale Stores (Jan)	1,882,960	3,054,764	498,281	4
■	337	■	■	Castle & Cooke (June)	1,116,693	1,823,233	248,522	

■ Not on 500 list.

[1]Figures include unconsolidated subsidiaries.

[5]Formerly First National Boston

[6]Formerly New England Merchants

A Summary of the 500s' Rankings

Cash flow (000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
2,761	4,500	NASDAQ	BPOP	6.06	1.44	22	San Juan, PR	3.5	Rafael Carrión Jr
5,149	8,035	NASDAQ	BOHI	2.76	1.00	16½	Columbus, Ohio	5.9	Arthur D Herrmann
3,288	7,703	NASDAQ	BNHI	3.76	1.12	21¾	Honolulu, Haw	2.8	Frank J Manaut
7,734	18,153	NYSE	BKBOS	6.67	1.92	33¾	Boston, Mass	12.8	William L Brown
5,187	4,393	NASDAQ	BKNE	7.93	2.35	44½	Boston, Mass	4.1	Roderick M MacDougall
5,317	7,305	NYSE	BK	10.18	3.25	49¾	New York, NY	8.3	John Carter Bacot
5,717	5,790	NYSE	BKV	3.77	1.20	21⅜	Richmond, Va	2.9	Frederick Deane Jr
5,670	147,680	NYSE	BAC	2.61	1.52	20⅛	San Francisco, Cal	86.4	Samuel H Armacost
5,176	28,194	NYSE	BT	7.75	2.05	37⅛	New York, NY	12.2	Alfred Brittain III
5,287	13,795	NYSE	BBF	3.46	1.02	27	Jacksonville, Fla	8.2	Charles E Rice
7,861	70,533	NYSE	BAX	2.64	0.44	48⅜	Deerfield, Ill	30.1	Vernon R Loucks Jr
9,560	6,278	NASDAQ	BBNK	5.34	1.75	30	Boston, Mass	4.7	William M Crozier Jr
1,668	99,059	NYSE	BRY	3.48	1.48	23½	Chicago, Ill	80.0	James L Dutt
3,084	20,585	NYSE	BDX	3.63	1.10	42½	Paramus, NJ	21.4	Wesley J Howe
1,282	23,894	NYSE	BPC	4.35	0.65	23⅝	New York, NY	1.3	Arthur B Belfer
3,700	22,242	NYSE	BNL	–2.36	2.00	24½	Wilmington, Del	14.9	Finn M W Caspersen
2,505	987	NASDAQ	BKHT	31.93	none	775	New Bedford, Mass	0.6	Warren E Buffet
5,272	15,842	NYSE	BES	2.45	0.32	25	Richmond, Va	18.7	Sydney Lewis
2,900	43,682	NYSE	BS	–33.64	1.30	19¼	Bethlehem, Pa	66.9	Donald H Trautlein
9,313	21,819	ASE	BEV	1.33	0.27	26	Pasadena, Cal	48.0	Robert Van Tuyle
3,881	42,440	NYSE	BIG	2.05	0.69	22½	Houston, Tex	5.8	Harry K Smith
5,573	42,109	NYSE	BDK	–1.82	0.70	18⅛	Towson, Md	16.4	Laurence J Farley
3,613	12,763	NYSE	BBL	2.92	1.80	31⅛	Greensboro, NC	31.5	Edward J Bauman
9,308	4,346	NASDAQ	BOAT	4.78	1.44	22⅞	St Louis, Mo	1.8	Donald N Brandin
5,000	96,590	NYSE	BA	3.02	1.40	33⅞	Seattle, Wash	95.7	Thornton A Wilson
1,260	26,694	NYSE	BCC	0.26	1.90	39	Boise, Ida	28.4	John B Fery
5,652	28,531	NYSE	BN	5.81	2.18	47⅝	New York, NY	33.2	Eugene J Sullivan
7,600	41,771	NYSE	BOR	3.90	1.43	37⅞	Chicago, Ill	61.7	James F Beré
0,413	14,665	NYSE	BSE	3.18	2.80	26	Boston, Mass	3.9	Thomas J Galligan Jr
0,100	67,587	NYSE	BMY	5.18	2.04	67¼	New York, NY	35.3	Richard L Gelb
2,969	2,973	NASDAQ	BDVF	–8.55	0.01	4⅜	Cleveland, Ohio	0.7	John E Rupert
0,865	8,451	NYSE	BU	4.60	2.70	29⅞	Brooklyn, NY	3.6	Eugene H Luntey
0,046	25,171	ASE	BFD B	3.43	0.82	35⅞	Louisville, Ky	2.6	W L Lyons Brown Jr
2,209	10,619	NYSE	BG	5.55	1.76	56	St Louis, Mo	27.0	Bernard A Bridgewater Jr
2,596	29,771	NYSE	BFI	2.07	0.67	35⅝	Houston, Tex	11.8	Harry J Phillips Sr
5,252	11,623	NYSE	BC	13.68	1.00	25	Skokie, Ill	20.0	Jack F Reichert
8,924	28,520	NYSE	BUR	1.85	1.52	28	Greensboro, NC	58.5	William A Klopman
7,454	36,998	NYSE	BNI	7.39	1.67	53⅛	Seattle, Wash	49.5	Richard M Bressler
1,086	42,196	NYSE	BGH	2.17	2.60	41¾	Detroit, Mich	64.5	W Michael Blumenthal
9,843	31,819	NYSE	CBT	2.77	0.92	20⅞	Boston, Mass	7.6	Robert A Charpie
6,529	9,878	NASDAQ	CFBK	1.10	1.03	15⅛	San Francisco, Cal	3.8	Yasushi Sumiya
7,188	30,320	NYSE	CIW	5.02	0.40	21	Houston, Tex	11.1	Myron A Wright
1,630	32,225	NYSE	CPB	4.64	2.10	48⅜	Camden, NJ	40.2	R Gordon McGovern
7,529	13,180	NYSE	CCB	7.25	0.20	119⅝	New York, NY	7.2	Thomas S Murphy
8,261	26,275	NYSE	CPH	3.98	1.32	35¼	Louisville, Ky	8.2	Thomas C Simons
7,343	36,578	NYSE	CMK	5.21	2.00	44¼	Los Angeles, Cal	21.8	H Everett Olson
9,012	58,835	NYSE	CPL	3.17	2.40	21½	Raleigh, NC	7.8	Sherwood H Smith Jr
2,340E	31,890	NYSE	CHH	1.55	1.22	15⅝	Los Angeles, Cal	55.5	Philip M Hawley
5,395	28,701	NYSE	CKE	0.17	0.38	8¾	Honolulu, Haw	36.0	Ian R Wilson

share data adjusted for stock splits and stock dividends through May 9, 1983

Estimate.

"Take the world's finest executive je and make it even better. That's wha we're doing with the Gulfstream III.

As a pilot, Allen Paulson has an innate understanding of aircraft design and performance. As an aerospace industry executive, he received the prestigious James H. Doolittle Award in 1982, given by the Society of Experimental Test Pilots for achievement in management.

By Allen E. Paulson

Chairman and President
Gulfstream Aerospace Corporation

"I think I can safely say that since it first flew on schedule in December 1979, our Gulfstream III has dominat the market for intercontinental business jets.

"Evidently, decision makers in the world's leading corporations and governments have determined time ar time again there is no alternative to th levels of performance and productivit the Gulfstream III offers.

"Even its challengers apparently have concluded that its superiority is overwhelming.

"They have had to rethink where they fit into the market; and for the most part, they are now comparing themselves, not with the Gulfstream I or even the Gulfstream II, but with *medium-sized* business jets.

"The Gulfstream III we are now delivering to customers *is* a remarkab airplane.

"But we know that every machine, no matter how good it is, can be improved.

"And the Gulfstream III is no exception.

Meaningful technology, meaningful improvements.

"In my experience, the airplane has always been an ideal candidate for improvement.

"Technology and engineering ingenuity find ways to make it land and take off better, fly farther and higher, handle better, use less fuel, be more efficient—and not t least important—safer to operate.

"That's why we are constantly looking at the Gulfstream III to

If you are interested in knowing more about Gulfstream Aerospace Corporation, we will be pleased to send you our latest annual report. Address your request to Senior Vice President, Finance, Gulfstream Aerospace Corporation, P.O. Box 2206, Savannah, Georgia 31402 U.S.A.

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nd places where improvements can
: made that will be meaningful for
e executives and government leaders
ho travel in it and the pilots who fly it.

"Take the cockpit.

"The new generation of commercial
rliners has brought about a techno-
gical revolution in equipment and
stems available to the flight crew.

"Because our customers demand as
uch sophistication—if not more—in
eir aircraft as the airlines do, we are
ngineering these highly advanced new
stems into the Gulfstream III.

"For example, the Gulfstream III is
eally suited to accept electronic flight
strument systems—EFIS, for short—
at are standard on the Boeing 757
nd 767.

"For years, basic aircraft flight
struments have been complicated,
agile electro-mechanical devices,
mited in the type and amount of
formation they could display.

"EFIS is changing all that.

"EFIS brings the familiar television
onitor into the cockpit; and symbol
enerators driven by air data com-
uters create an almost unlimited
mount of highly reliable data that can
e displayed to the crew in far more
eaningful ways—commands, direc-
ves, color visual cues and symbols.

"We're making sure EFIS will be
vailable on the Gulfstream III because

With the largest, longest cabin of any executive jet, the Gulfstream III easily accommodates custom-designed interiors that provide optimum in-flight environment for as many as 19 passengers.

it will put a better airplane in the hands of more effective pilots.

Improving the parts to improve the whole.

"It is amazing to think of all the new technology that has appeared since we first flew the Gulfstream III prototype just three years ago. It is also gratifying to think how quickly so much of it has found its way into the Gulfstream III.

"Digital display instruments are replacing the familiar analog type.

"Lighter, more powerful 'black boxes' take less space on the avionics rack, but increase dependability.

"The Gulfstream III is the *first* transport aircraft to incorporate an advanced solid-state AC electrical system that, until now, has been available only on sophisticated military aircraft.

"Soon, a Gulfstream III will be equipped with an inertial navigation system that uses a ring laser gyro instead of conventional gyros. The increases in accuracy, programming speed and reliability in this optional flight guidance system will be dramatic.

Exchanging weight for muscle.

"We're even making the Gulfstream III lighter so it can work harder.

"For every 200 pounds of weight we can take out of the basic airplane, an operator can add another passenger and baggage or an equivalent amount of fuel. So our on-going weight reduction program is another way of improving the Gulfstream III, with an emphasis on productivity.

"The new AC electrical system, for instance, weighs nearly 200 pounds less than the system it replaces.

"More weight will come out when we begin installing new control surfaces—rudder, ailerons, flaps—we're engineering of composite structures developed for space vehicles.

"These new materials will help reduce the weight of the Gulfstream III without compromising structural integrity.

"The list of major improvements we're making in the Gulfstream III gets very long.

"The reason is very simple.

"Our plan to continue dominating the market for executive jets is to make certain we always will have the best airplane you can own and operate.

"I invite you to get in touch with Charles G. Vogeley, our Senior Vice President of Marketing, in Savannah, Georgia at (912) 964-3274.

"He can tell you all the reasons why, as an investment in superlative executive transport, the world's finest executive jet gets better and better all the time."

Gulfstream Aerospace

The Gulfstream III. The Ultimate.

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net (
109	72	60	■	Caterpillar Tractor (Dec)	7,201,000	6,469,000	3,541,673	–18
■	463	416	311	CBI Industries (Dec)	978,565	1,210,244	669,024	8
355	148	146	257	CBS (Dec)	2,682,874	4,052,271	1,771,110	11
175	■	■	■	CBT (Dec)	5,069,859	459,844	227,089	3
327	212	402	■	Celanese (Dec)	2,862,000	3,062,000	704,950	–3
■	■	■	406	[7]Celeron (Dec)	709,769	942,827	430,000	6
429	475	287	262	[8]Centel (Dec)	2,199,397	1,156,180	1,009,723	10
172	■	■	■	Centerre Bancorporation (Dec)	5,122,499	617,030	144,362	2
170	275	186	99	Central & South West (Dec)	5,134,916	2,389,253	1,516,021	25
332	■	■	■	Central Bancorporation (Dec)	2,833,198	300,393	112,574	2
360	■	■	■	Central Bancshares of the South (Dec)	2,657,520	298,416	87,793	2
377	■	■	■	Central Fidelity Banks (Dec)	2,532,764	277,197	112,392	1
■	■	■	400	Central Illinois Public Service (Dec)	1,468,679	587,083	500,170	6
■	347	■	■	Central Soya (Aug)	543,642	1,753,142	252,816	1
340	■	■	■	Centran (Dec)	2,761,693	329,586	56,289	–5
264	165	216	■	Champion International (Dec)	3,471,994	3,737,378	1,305,110	3
161	80	■	■	[1]Charter (Dec)	5,309,832	6,064,959	237,270	1
401	■	■	■	[9]CharterCorp (Dec)	2,390,547	258,935	104,885	1
4	41	157	80	Chase Manhattan (Dec)	80,862,903	10,171,436	1,661,884	30
9	95	282	105	Chemical New York (Dec)	48,274,842	5,515,159	1,026,878	24
■	365	166	238	Chesebrough-Pond's (Dec)	1,043,420	1,623,190	1,616,085	12
126	42	199	280	Chrysler (Dec)	6,263,576	10,044,938	1,410,681	10
295	398	457	372	Chubb (Dec)	3,202,808	1,508,637	611,479	7
21	34	74	39	CIGNA (Dec)	31,395,332	11,786,857	3,251,357	49
344	446	378	229	Cincinnati Gas & Electric (Dec)	2,737,453	1,260,507	753,568	13
■	■	483	■	Cincinnati Milacron (Dec)	660,514	759,688	571,851	1
2	20	46	24	Citicorp (Dec)	129,997,000	17,814,000	4,134,715	72
137	■	■	476	Citizens & Southern Georgia (Dec)	6,004,578	635,445	320,291	5
397	■	■	■	Citizens Fidelity (Dec)	2,407,405	348,966	186,573	2
205	■	■	■	City Federal Savings & Loan Association (Dec)	4,528,450	554,098	113,494	1
101	86	266	327	City Investing (Dec)	7,554,500	5,771,100	1,081,337	8
488	■	■	■	City National (Dec)	1,859,188	219,450	168,344	1
241	497	231	127	Cleveland Electric Illuminating (Dec)	3,843,294	1,108,571	1,220,056	20
■	■	467	■	Clorox (June)	539,563	867,141	595,015	4
289	85	■	404	Coastal Corp (Dec)	3,225,673	5,799,413	423,900	6
183	76	22	36	Coca-Cola (Dec)	4,923,310	6,249,718	7,058,480	51
373	114	169	140	Colgate-Palmolive (Dec)	2,574,413	4,887,995	1,608,406	19
■	455	■	■	Colonial Penn Group (Dec)	1,052,663	1,236,119	266,046	2
398	■	■	■	Colorado Natl Bankshares (Dec)	2,406,374	261,529	141,085	2
■	397	386	■	Colt Industries (Dec)	1,190,234	1,511,594	742,822	–16
168	106	280	151	Columbia Gas System (Dec)	5,154,666	5,070,591	1,033,898	18
389	■	381	320	Combined International (Dec)	2,453,217	1,043,895	748,886	8
336	175	261	178	Combustion Engineering (Dec)	2,823,839	3,569,817	1,086,322	15
103	■	■	■	[10]Comerica (Dec)	7,378,332	751,554	237,674	3
276	■	■	■	Commerce Bancshares (Dec)	3,342,976	359,965	167,063	3
■	■	500	■	Commerce Clearing House (Dec)	272,617	350,132	558,000	3
419	■	■	■	[11]Commerce Union (Dec)	2,288,671	279,119	45,605	
54	143	51	29	Commonwealth Edison (Dec)	13,729,477	4,129,666	3,755,559	60
■	■	403	■	Communications Satellite (Dec)	812,969	409,507	702,000	4

■ Not on 500 list.

[1]Figures include unconsolidated subsidiaries.
[7]Formerly Central Louisiana Energy.
[8]Formerly Central Telephone & Utilities.
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A Summary of the 500s' Rankings

Cash flow ($000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
57,000	88,266	NYSE	CAT	−2.04	2.40	40⅛	Peoria, Ill	73.2	Lee L Morgan
59,850	17,321	NYSE	CBH	5.06	1.55	38⅝	Oak Brook, Ill	11.0	William A Pogue
13,683	29,642	NYSE	CBS	4.01	2.80	59¾	New York, NY	32.5	Thomas H Wyman
51,155	8,651	NASDAQ	CBCT	5.36	1.54	26¼	Hartford, Conn	3.8	Walter J Connolly Jr
45,000	15,579	NYSE	CZ	−2.45	4.00	45¼	New York, NY	27.4	John D Macomber
18,213	21,500	NYSE	CEL	3.01	0.60	20	Lafayette, La	0.7	Gale L Galloway
85,460	27,016	NYSE	CNT	3.96	2.20	37⅜	Chicago, Ill	13.6	Robert P Reuss
49,076	7,598	NASDAQ	CTBC	3.05	1.80	19	St Louis, Mo	3.7	Clarence C Barksdale
74,045	87,253	NYSE	CSR	2.82	1.68	17⅜	Dallas, Tex	8.8	Durwood Chalker
34,083	5,236	NASDAQ	CBAN	4.04	1.95	21½	Cincinnati, Ohio	2.8	Oliver W Birckhead
31,464	6,689	NASDAQ	CBSS	3.18	0.86	13⅛	Birmingham, Ala	2.1	Harry B Brock Jr
27,618	5,352	NASDAQ	CFBS	3.56	1.24	21	Richmond, Va	2.7	Carroll L Saine
22,532	32,269	NYSE	CIP	1.81	1.47	15½	Springfield, Ill	2.9	Donald G Raymer
56,807	15,207	NYSE	CSY	1.28	0.84	16⅝	Fort Wayne, Ind	18.3	Douglas G Fleming
36,814	3,882	NASDAQ	CENB	−15.91	0.40	14½	Cleveland, Ohio	2.5	Wilson M Brown Jr
94,553	54,952	NYSE	CHA	0.45	0.94	23¾	Stamford, Conn	39.4	Andrew C Sigler
79,186	21,570	NYSE	CHR	0.19	1.00	11	Jacksonville, Fla	5.4	Raymond K Mason
17,548	3,814	NASDAQ	CHCP	3.15	1.88	27½	Kansas City, Mo	2.0	Gordon E Wells
19,771	33,916	NYSE	CMB	7.73	3.40	49	New York, NY	35.5	Willard C Butcher
25,213	25,355	NYSE	CHL	8.41	2.80	40½	New York, NY	19.6	Donald C Platten
68,243	35,913	NYSE	CBM	3.56	1.72	45	Greenwich, Conn	21.3	Ralph E Ward
53,000	79,475	NYSE	C	0.97	none	17¾	Highland Park, Mich	73.7	Lee A Iacocca
79,320	12,322	NASDAQ	CHUB	6.03	2.92	49⅝	New York, NY	7.8	Henry U Harder
18,200	73,477	NYSE	CI	6.38	2.30[10]	44¼	New York, NY	40.9	Robert D Kilpatrick
82,752	40,460	NYSE	CIN	2.75	2.12	18⅝	Cincinnati, Ohio	5.1	William H Dickhoner
40,770	22,536	NYSE	CMZ	0.53	0.72	25⅜	Cincinnati, Ohio	12.0	James A D Geier
36,000	127,222	NYSE	FNC	5.60	1.68	32½	New York, NY	59.4	Walter B Wriston
90,332	30,145	NASDAQ	CSGA	1.67	0.50	10⅝	Atlanta, Ga	5.6	Bennett A Brown
39,961	8,068	NASDAQ	CFDY	3.11	1.04	23⅛	Louisville, Ky	1.8	J David Grissom
32,177	6,394	NASDAQ	CTYF	1.97	none	17¾	Elizabeth, NJ	2.2	Gilbert G Roessner
02,800	35,895	NYSE	CNV	2.29	1.68	30⅛	New York, NY	65.1	George T Scharffenberger
0,556	7,566	NASDAQ	CTYN	1.92	0.77	22¼	Beverly Hills, Cal	1.8	Bram Goldsmith
91,711	61,775	NYSE	CVX	3.01	2.19	19¾	Cleveland, Ohio	5.3	Robert M Ginn
6,281	24,041	NYSE	CLX	1.90	0.90	24¾	Oakland, Cal	5.4	Calvin S Hatch
1,066	21,600	NYSE	CGP	2.65	0.40	19⅝	Houston, Tex	6.5	Oscar S Wyatt Jr
9,694	135,740	NYSE	KO	3.95	2.48	52	Atlanta, Ga	39.4	Roberto C Goizueta
2,257	81,957	NYSE	CL	2.41	1.20	19⅝	New York, NY	43.7	Keith Crane
5,696	16,124	NYSE	CPG	1.82	1.40	16½	Philadelphia, Pa	3.1	John J MacWilliams
3,936	7,784	NASDAQ	COLO	2.79	0.73	18⅛	Denver, Colo	4.8	Bruce M Rockwell
6,534	23,962	NYSE	COT	−6.37	1.80	31	New York, NY	22.9	George A Strichman
87,724	35,806	NYSE	CG	5.10	2.86	28⅞	Wilmington, Del	12.1	W Frederick Laird
257,801	27,109	NYSE	PMA	2.96	1.85	27⅝	Northbrook, Ill	5.0	Patrick G Ryan
283,395	33,044	NYSE	CSP	4.77	1.72	32⅞	Stamford, Conn	43.5	Arthur J Santry Jr
51,972	9,603	NASDAQ	CMCA	3.91	1.90	24¾	Detroit, Mich	4.6	Donald R Mandich
52,188	5,346	NASDAQ	CBSH	6.37	1.84	31¼	Kansas City, Mo	3.0	James M Kemper Jr
40,911	9,000	NASDAQ	CCLR	3.50	1.48	62	Chicago, Ill	5.3	Richard T Merrill
24,989	3,923	NASDAQ	COMU	2.14	0.80	11⅝	Nashville, Tenn	2.0	William F Earthman
876,830	148,735	NYSE	CWE	3.75	2.80	25¼	Chicago, Ill	17.2	James J O'Connor
168,614	9,000	NYSE	CQ	5.41	2.30	78	Washington, DC	3.2	Joseph V Charyk

ll share data adjusted for stock splits and stock dividends through May 9, 1983.

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net pr ($00
109	72	60	■	Caterpillar Tractor (Dec)	7,201,000	6,469,000	3,541,673	–180,0
■	463	416	311	CBI Industries (Dec)	978,565	1,210,244	669,024	88,1
355	148	146	257	CBS (Dec)	2,682,874	4,052,271	1,771,110	112,5
175	■	■	■	CBT (Dec)	5,069,859	459,844	227,089	31,0
327	212	402	■	Celanese (Dec)	2,862,000	3,062,000	704,950	–34,0
■	■	■	406	[7]Celeron (Dec)	709,769	942,827	430,000	65,0
429	475	287	262	[8]Centel (Dec)	2,199,397	1,156,180	1,009,723	108,1
172	■	■	■	Centerre Bancorporation (Dec)	5,122,499	617,030	144,362	23,2
170	275	186	99	Central & South West (Dec)	5,134,916	2,389,253	1,516,021	259,2
332	■	■	■	Central Bancorporation (Dec)	2,833,198	300,393	112,574	21,1
360	■	■	■	Central Bancshares of the South (Dec)	2,657,520	298,416	87,793	21,3
377	■	■	■	Central Fidelity Banks (Dec)	2,532,764	277,197	112,392	18,4
■	■	■	400	Central Illinois Public Service (Dec)	1,468,679	587,083	500,170	66,3
■	347	■	■	Central Soya (Aug)	543,642	1,753,142	252,816	19,4
340	■	■	■	Centran (Dec)	2,761,693	329,586	56,289	–58,6
264	165	216	■	Champion International (Dec)	3,471,994	3,737,378	1,305,110	39,6
161	80	■	■	[1]Charter (Dec)	5,309,832	6,064,959	237,270	11,4
401	■	■	■	[9]CharterCorp (Dec)	2,390,547	258,935	104,885	12,0
4	41	157	80	Chase Manhattan (Dec)	80,862,903	10,171,436	1,661,884	307,4
9	95	282	105	Chemical New York (Dec)	48,274,842	5,515,159	1,026,878	240,5
■	365	166	238	Chesebrough-Pond's (Dec)	1,043,420	1,623,190	1,616,085	125,2
126	42	199	280	Chrysler (Dec)	6,263,576	10,044,938	1,410,681	103,2
295	398	457	372	Chubb (Dec)	3,202,808	1,508,637	611,479	74,2
21	34	74	39	CIGNA (Dec)	31,395,332	11,786,857	3,251,357	490,1
344	446	378	229	Cincinnati Gas & Electric (Dec)	2,737,453	1,260,507	753,568	130,4
■	■	483	■	Cincinnati Milacron (Dec)	660,514	759,688	571,851	12,2
2	20	46	24	Citicorp (Dec)	129,997,000	17,814,000	4,134,715	723,0
137	■	■	476	Citizens & Southern Georgia (Dec)	6,004,578	635,445	320,291	50,0
397	■	■	■	Citizens Fidelity (Dec)	2,407,405	348,966	186,573	25,0
205	■	■	■	City Federal Savings & Loan Association (Dec)	4,528,450	554,098	113,494	13,1
101	86	266	327	City Investing (Dec)	7,554,500	5,771,100	1,081,337	84,6
488	■	■	■	City National (Dec)	1,859,188	219,450	168,344	14,5
241	497	231	127	Cleveland Electric Illuminating (Dec)	3,843,294	1,108,571	1,220,056	208,9
■	■	467	■	Clorox (June)	539,563	867,141	595,015	45,
289	85	■	404	Coastal Corp (Dec)	3,225,673	5,799,413	423,900	65,6
183	76	22	36	Coca-Cola (Dec)	4,923,310	6,249,718	7,058,480	512,2
373	114	169	140	Colgate-Palmolive (Dec)	2,574,413	4,887,995	1,608,406	196,9
■	455	■	■	Colonial Penn Group (Dec)	1,052,663	1,236,119	266,046	29,3
398	■	■	■	Colorado Natl Bankshares (Dec)	2,406,374	261,529	141,085	21,4
■	397	386	■	Colt Industries (Dec)	1,190,234	1,511,594	742,822	–161,3
168	106	280	151	Columbia Gas System (Dec)	5,154,666	5,070,591	1,033,898	184,5
389	■	381	320	Combined International (Dec)	2,453,217	1,043,895	748,886	86,5
336	175	261	178	Combustion Engineering (Dec)	2,823,839	3,569,817	1,086,322	158,
103	■	■	■	[10]Comerica (Dec)	7,378,332	751,554	237,674	35,6
276	■	■	■	Commerce Bancshares (Dec)	3,342,976	359,965	167,063	31,
■	■	500	■	Commerce Clearing House (Dec)	272,617	350,132	558,000	31,
419	■	■	■	[11]Commerce Union (Dec)	2,288,671	279,119	45,605	9,
54	143	51	29	Commonwealth Edison (Dec)	13,729,477	4,129,666	3,755,559	606,
■	■	403	■	Communications Satellite (Dec)	812,969	409,507	702,000	43,

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The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net ($
■	■	327	■	Computervision (Dec)	274,140	325,185	846,315	32
■	355	■	■	ConAgra (May)	488,570	1,705,169	509,796	32
96	107	94	38	Consolidated Edison (Dec)	7,872,069	5,067,404	2,634,763	492
400	81	213	183	Consolidated Foods (June)	2,398,802	6,039,276	1,311,378	156
■	464	412	449	Consolidated Freightways (Dec)	899,442	1,203,796	674,200	54
281	201	297	176	Consolidated Natural Gas (Dec)	3,271,881	3,210,985	950,670	159
99	243	203	89	Consumers Power (Dec)	7,593,816	2,731,081	1,387,017	280
418	■	■	■	[12]Continental Bancorp (Dec)	2,300,148	266,023	143,750	25
86	180	163	274	Continental Corp (Dec)	8,619,394	3,505,788	1,620,369	105
146	93	254	156	[1]Continental Group (Dec)	5,727,400	5,564,200	1,109,318	180
11	82	346	354	Continental Illinois (Dec)	42,899,424	5,900,040	813,879	77
239	340	258	195	[13]Continental Telecom (Dec)	3,864,625	1,817,689	1,092,149	150
117	135	204	189	Control Data (Dec)	6,911,900	4,292,000	1,379,862	153
■	■	413	■	Convergent Technologies (Dec)	100,868	96,462	673,362	11
458	273	229	218	Cooper Industries (Dec)	2,036,547	2,393,989	1,223,089	135
494	382	201	370	Corning Glass Works (Dec)	1,797,700	1,578,700	1,396,418	74
■	■	233	405	[14]Cox Communications (Dec)	800,146	514,746	1,211,578	65
395	146	128	110	CPC International (Dec)	2,412,961	4,091,464	2,016,149	231
■	487	■	■	Crane (Dec)	857,177	1,126,398	240,730	–3
■	■	496	■	Cray Research (Dec)	223,968	141,149	561,183	19
26	232	■	382	Crocker National (Dec)	24,938,759	2,893,659	522,083	71
■	344	■	■	Crown Central Petroleum (Dec)	643,055	1,772,468	87,858	7
■	425	■	■	Crown Cork & Seal (Dec)	840,599	1,351,859	412,528	44
402	223	357	■	Crown Zellerbach (Dec)	2,385,600	2,947,400	790,687	–112
91	113	112	62	CSX (Dec)	8,109,100	4,908,600	2,158,293	338
314	■	■	■	Cullen/Frost Bankers (Dec)	3,013,111	353,092	150,942	26
■	379	■	■	Cummins Engine (Dec)	1,281,804	1,587,476	411,011	7
471	266	223	469	Dana (Dec)	1,984,472	2,422,937	1,264,414	51
171	43	52	57	Dart & Kraft (Dec)	5,133,800	9,974,400	3,750,033	350
319	88	93	130	Dayton-Hudson (Jan)	2,984,147	5,660,729	2,656,198	206
461	■	449	258	Dayton Power & Light (Dec)	2,017,099	886,648	633,472	112
139	119	129	461	Deere (Oct)	5,935,679	4,608,226	1,996,501	52
■	■	■	374	Delmarva Power & Lt (Dec)	1,471,457	636,666	475,661	73
359	171	148	■	Delta Air Lines (June)	2,657,880	3,617,523	1,759,424	20
■	■	304	407	Deluxe Check Printers (Dec)	349,756	549,519	923,053	64
450	■	■	■	Deposit Guaranty (Dec)	2,073,295	231,738	92,626	16
98	304	193	101	Detroit Edison (Dec)	7,635,741	2,123,254	1,462,007	254
297	205	211	198	Diamond Shamrock (Dec)	3,193,714	3,177,379	1,326,565	149
■	■	434	■	Diebold (Dec)	264,736	427,639	645,990	41
225	155	28	46	Digital Equipment (June)	4,024,013	3,880,771	5,553,991	417
446	■	117	284	Walt Disney Productions (Sept)	2,102,816	1,030,250	2,112,424	100
291	■	■	■	Dominion Bankshares (Dec)	3,224,685	372,181	138,496	17
159	■	■	■	Donaldson, Lufkin & Jenrette (Dec)	5,324,973	628,667	219,349	18
■	419	250	304	R R Donnelley & Sons (Dec)	968,709	1,404,206	1,131,928	91
■	474	■	■	Dorchester Gas (Aug)	533,468	1,159,101	194,688	17
■	■	259	309	Dover (Dec)	611,535	1,035,212	1,090,005	89
65	39	33	61	Dow Chemical (Dec)	11,807,000	10,618,000	5,024,149	342
■	■	118	313	Dow Jones (Dec)	594,741	730,673	2,097,885	88
■	478	■	■	Dravo (Dec)	640,861	1,151,617	161,308	–11

■ Not on 500 list

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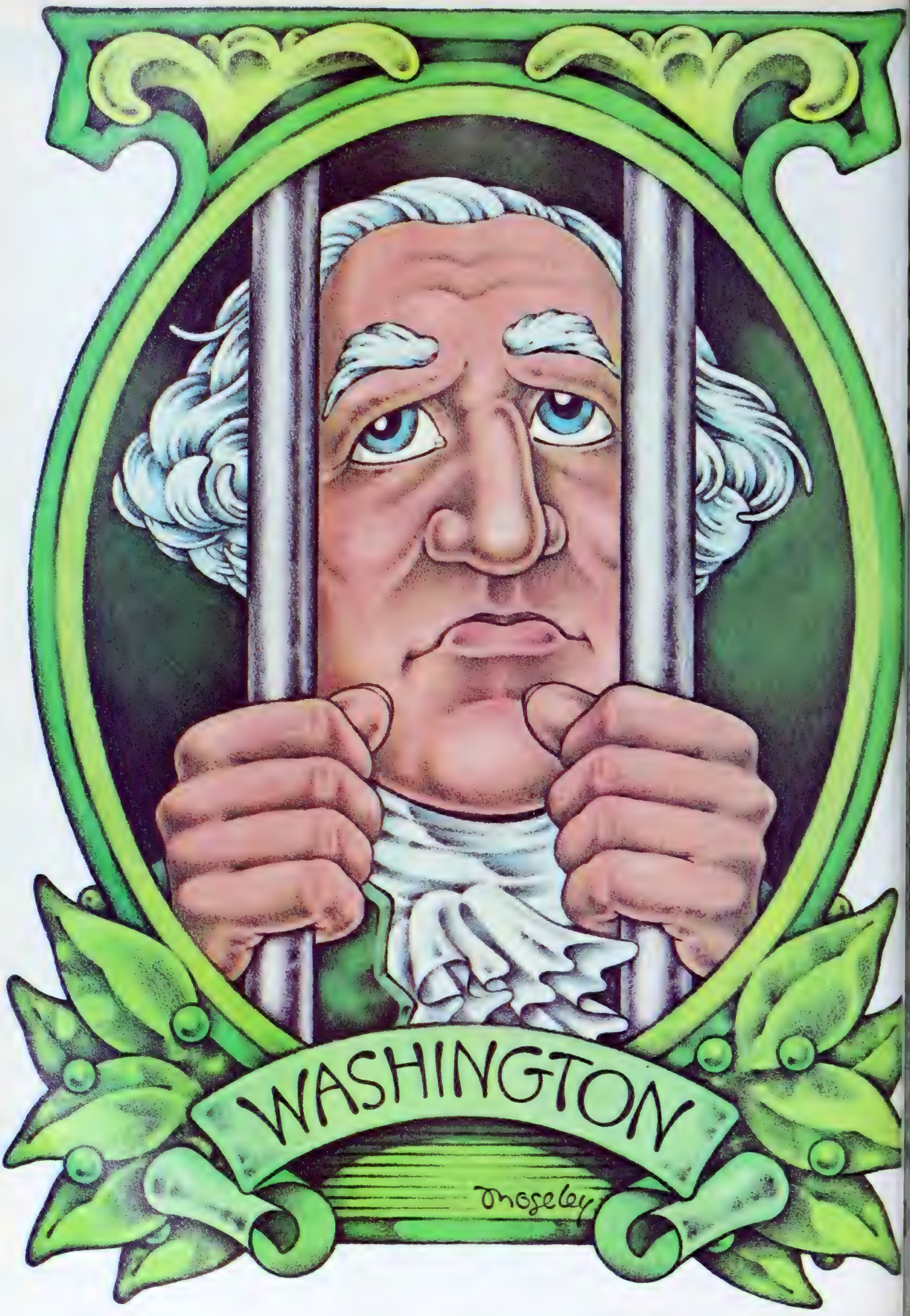
[14]Formerly Cox Broadcasting

A Summary of the 500s' Rankings

Cash flow ($000)	Share data: 1982 — Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
58,258	27,411	NYSE	CVN	1.18	none	30⅞	Bedford, Mass	4.0	James R Berrett
50,274	18,207	NYSE	CAG	2.51	0.90	28	Omaha, Neb	11.6	Charles M Harper
519,861	128,525	NYSE	ED	3.55	1.68	20½	New York, NY	22.7	Arthur Hauspurg
533,532	29,061	NYSE	CFD	5.39	2.12	45⅛	Chicago, Ill	88.9	John H Bryan Jr
16,348	13,484	NYSE	CNF	4.08	1.58	50	Palo Alto, Cal	16.9	Raymond F O'Brien
482,039	40,240	NYSE	CNG	3.90	1.88	23⅝	Pittsburgh, Pa	7.5	George J Tankersley
395,283	70,676	NYSE	CMS	3.16	2.44	19⅝	Jackson, Mich	12.8	John D Selby
35,125	5,000	NASDAQ	CBRP	5.12	1.94	28¾	Norristown, Pa	1.7	Roy T Peraino
207,627	54,696	NYSE	CIC	2.04	2.60	29⅝	New York, NY	19.2	John P Mascotte
451,400	32,627	NYSE	CCC	4.81	2.60	34	Stamford, Conn	48.7	S Bruce Smart Jr
585,415	39,945	NYSE	CIL	1.95	2.00	20⅜	Chicago, Ill	12.8	Roger E Anderson
481,616	63,313	NYSE	CTC	2.32	1.56	17¼	Atlanta, Ga	21.6	Charles Wohlstetter
542,300	37,168	NYSE	CDA	4.06	0.54	37⅛	Minneapolis, Minn	58.3	William C Norris
13,557	30,038	NASDAQ	CVGT	0.42	none	22½	Santa Clara, Cal	0.4	Allen H Michels
207,804	42,728	NYSE	CBE	2.76	1.45	28⅝	Houston, Tex	34.9	Robert Cizik
113,600	21,198	NYSE	GLW	3.52	2.32	65⅞	Corning, NY	30.9	James R Houghton
158,763	28,341	NYSE	COX	2.31	0.27	42¾	Atlanta, Ga	6.4	William A Schwartz
304,300	48,436	NYSE	CPC	4.80	2.06	41⅝	Englewood Cliffs, NJ	38.7	James W McKee Jr
75,708	10,178	NYSE	CR	–0.32	1.66	23¾	New York, NY	15.5	Thomas M Evans
61,850	14,529	NYSE	CYR	1.38	none	38⅝	Minneapolis, Minn	1.2	John A Rollwagen
134,483	19,159	NYSE	CKN	3.62	2.40	27¼	San Francisco, Cal	15.3	John B M Place
66,564	6,220	ASE	CNP A	0.92	0.80	14⅛	Baltimore, Md	1.7	Henry A Rosenberg Jr
87,054	13,984	NYSE	CCK	3.15	none	29½	Philadelphia, Pa	13.8	John F Connelly
113,500	26,917	NYSE	ZB	–4.86	1.98	29⅜	San Francisco, Cal	27.1	William T Creson
596,100	42,216	NYSE	CSX	8.10	2.84	51⅛	Richmond, Va	63.0	Hays T Watkins
47,240	6,861	NASDAQ	CFBI	3.78	0.84	22	San Antonio, Tex	2.3	Thomas C Frost
94,767	8,431	NYSE	CUM	0.21	2.00	48¾	Columbus, Ind	20.9	Henry B Schacht
136,381	36,386	NYSE	DCN	1.43	1.60	34¾	Toledo, Ohio	32.1	Gerald B Mitchell
684,500	54,745	NYSE	DKI	6.40	3.60	68½	Northbrook, Ill	79.9	John M Richman
342,707	48,185	NYSE	DH	4.29	1.13	55⅛	Minneapolis, Minn	77.5	William A Andres
151,990	36,723	NYSE	DPL	2.65	1.90	17¼	Dayton, Ohio	3.6	Robert E Frazer
166,426	67,678	NYSE	DE	0.78	2.00	29½	Moline, Ill	54.6	Robert A Hanson
135,350	29,048	NYSE	DEW	2.13	1.58	16⅜	Wilmington, Del	2.7	Nevius M Curtis
287,722	39,761	NYSE	DAL	0.52	1.00	44¼	Atlanta, Ga	37.4	David C Garrett Jr
104,913	22,933	NYSE	DLX	2.83	1.06	40¼	St Paul, Minn	9.8	Eugene R Olson
29,949	3,194	NASDAQ	DEPS	5.06	1.90	29	Jackson, Miss	1.6	John P Maloney
468,121	111,391	NYSE	DTE	1.75	1.68	13⅛	Detroit, Mich	11.2	Walter J McCarthy Jr
446,527	63,548	NYSE	DIA	2.37	1.76	20⅞	Dallas, Tex	12.2	William H Bricker
48,108	8,671	NYSE	DBD	4.80	0.80	74½	Canton, Ohio	6.2	Earl F Wearstler
570,713	55,819	NYSE	DEC	7.53	none	99½	Maynard, Mass	65.1	Kenneth H Olsen
216,828	33,398	NYSE	DIS	3.01	1.20	63¼	Burbank, Cal	26.5	Ronald W Miller
31,007	9,805	NASDAQ	DMBK	1.79	1.00	14⅛	Roanoke, Va	3.1	Warner N Dalhouse
30,448	12,102	NYSE	DLJ	1.41	0.20	18⅛	New York, NY	3.7	Richard H Jenrette
180,976	19,024	NYSE	DNY	4.80	1.42	59½	Chicago, Ill	16.0	Charles W Lake Jr
54,742	17,500	ASE	DGS	1.01	0.16	11⅛	Dallas, Tex	1.2	George S Rooker
127,821	35,592	NYSE	DOV	2.52	0.68	30⅝	New York, NY	12.9	Gary L Roubos
1,067,000	194,170	NYSE	DOW	1.77	1.80	25⅞	Midland, Mich	60.2	Paul F Oreffice
119,987	63,814	NYSE	DJ	1.39	0.54	32⅞	New York, NY	5.6	Warren H Phillips
26,787	13,035	NYSE	DRV	–0.90	0.85	12⅜	Pittsburgh, Pa	12.6	Thomas F Faught Jr

All share data adjusted for stock splits and stock dividends through May 9, 1983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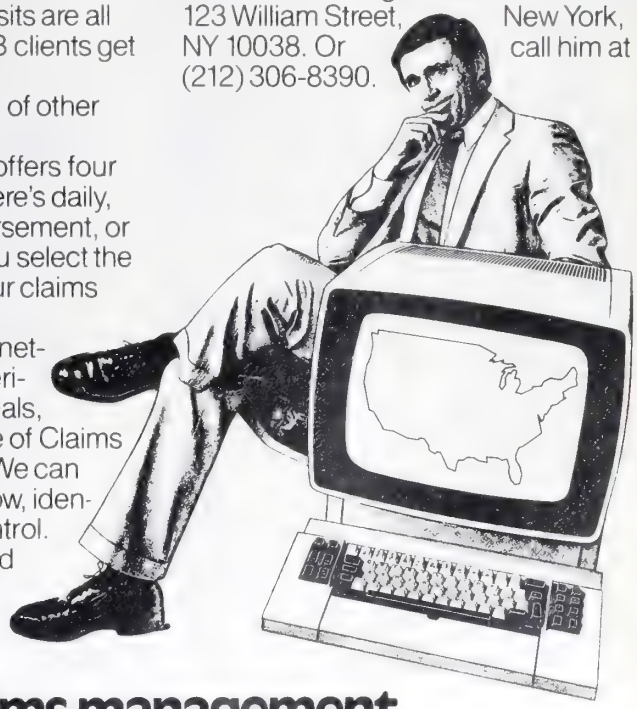

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The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net ($
279	141	177	162	Dresser Industries (Oct)	3,310,900	4,166,400	1,558,907	17
28	9	18	15	E I du Pont de Nemours (Dec)	24,343,000	33,223,000	8,485,908	89
113	290	110	58	Duke Power (Dec)	7,057,780	2,244,480	2,230,814	34
■	406	86	205	Dun & Bradstreet (Dec)	998,440	1,461,566	2,772,972	14
325	■	359	267	Duquesne Light (Dec)	2,883,411	746,462	785,836	10
■	■	396	■	E-Systems (Dec)	315,373	754,385	723,801	3
290	164	■	■	Eastern Air Lines (Dec)	3,224,887	3,769,237	198,544	−7
■	431	■	401	Eastern Gas & Fuel Associates (Dec)	1,344,729	1,325,621	491,017	6
71	38	6	12	Eastman Kodak (Dec)	10,614,156	10,815,000	14,233,000	1,16
459	264	307	■	Eaton (Dec)	2,030,124	2,452,573	920,704	−18
■	306	308	385	Jack Eckerd (July)	754,377	2,080,183	919,965	7
■	■	336	■	EG&G (Dec)	270,393	800,843	834,618	4
216	129	248	459	El Paso (Dec)	4,179,589	4,364,042	1,135,453	5
■	■	■	384	El Paso Electric (Dec)	1,138,605	270,090	383,205	7
■	■	217	496	Electronic Data Systems (June)	330,192	503,335	1,301,535	4
416	181	45	82	Emerson Electric (Sept)	2,319,799	3,502,327	4,148,183	30
■	353	494	344	Emhart (Dec)	1,002,200	1,710,400	563,017	8
■	314	318	408	Engelhard (Dec)	775,524	2,018,885	866,138	6
308	161	294	181	ENSERCH (Dec)	3,079,070	3,787,675	958,132	15
310	405	■	489	[1]Entex (June)	3,052,123	1,463,265	406,069	4
294	■	■	■	Equimark (Dec)	3,215,007	363,634	29,081	
387	■	■	■	Equitable Bancorporation (Dec)	2,457,505	283,733	92,570	1
499	194	328	265	Esmark (Oct)	1,758,241	3,303,220	845,518	10
448	334	■	294	[1]Ethyl (Dec)	2,074,885	1,845,623	547,107	9
■	454	■	■	Evans Products (Dec)	948,780	1,237,906	103,540	−6
■	■	■	485	Ex-Cell-O (Nov)	697,633	1,027,123	369,070	4
7	1	3	3	Exxon (Dec)	62,288,550	97,172,523	25,763,679	4,18
■	404	■	■	Farm House Foods (Mar)	273,608	1,463,793	34,633	
493	■	235	233	Farmers Group (Dec)	1,802,661	633,100	1,196,808	12
■	479	■	■	Federal Co (May)	310,820	1,149,861	231,452	1
■	■	162	353	Federal Express (May)	730,291	803,915	1,623,996	7
5	63	171	■	Federal National Mortgage Assoc (Dec)	73,466,703	7,384,157	1,603,305	−13
202	58	107	109	Federated Department Stores (Jan)	4,574,288	7,698,944	2,293,988	23
220	■	■	■	Fidelcor (Dec)	4,119,516	444,237	130,644	2
270	■	■	■	Fidelity Union Bancorp (Dec)	3,408,752	326,543	105,117	
122	■	■	■	Financial Corp of America (Dec)	6,611,883	775,280	395,939	3
466	■	■	■	Financial Corp of Santa Barbara (Dec)	2,006,678	245,938	22,207	−9
309	■	■	■	Financial Federation (Dec)	3,066,139	324,822	93,191	
356	158	301	■	Firestone Tire & Rubber (Oct)	2,672,000	3,869,000	933,196	
304	■	■	■	First Alabama Bancshares (Dec)	3,123,890	350,895	204,527	3
371	■	■	■	First American (Dec)	2,586,512	280,980	95,359	1
338	■	■	■	First & Merchants (Dec)	2,794,355	345,855	133,209	2
207	■	■	■	First Atlanta (Dec)	4,480,046	477,682	219,250	3
49	322	■	253	First Bank System (Dec)	16,899,365	1,961,408	532,636	11
47	423	■	295	First Boston (Dec)	17,324,189	1,394,960	346,913	9
83	■	■	■	First Charter Financial (Dec)	9,387,592	1,009,484	533,033	−6
19	128	390	214	First Chicago (Dec)	35,876,372	4,402,186	738,213	13
51	350	400	246	First City Bancorporation of Texas (Dec)	16,567,101	1,728,761	706,684	12
475	■	■	■	First Empire State (Dec)	1,946,894	249,930	69,549	1

■ Not on 500 list

[1]Figures include unconsolidated subsidiaries.

A Summary of the 500s' Rankings

Cash flow $000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
52,200	78,932	NYSE	DI	2.19	0.80	19¾	Dallas, Tex	51.0	**John V James**
37,000	236,541	NYSE	DD	3.75	2.40	35⅞	Wilmington, Del	171.1	**Edward G Jefferson**
57,000	95,949	NYSE	DUK	3.07	2.24	23¼	Charlotte, NC	20.2	**William S Lee**
78,771	28,152	NYSE	DNB	5.06	2.66	98½	New York, NY	26.0	**Harrington Drake**
58,760	53,277	NYSE	DQU	1.75	1.90	14¾	Pittsburgh, Pa	4.8	**John M Arthur**
43,886	14,404	NYSE	ESY	2.42	0.60	50¼	Dallas, Tex	12.0	**John W Dixon**
52,376	24,818	NYSE	EAL	–3.82	none	8	Miami, Fla	38.5	**Frank Borman**
25,305	22,706	NYSE	EFU	2.91	1.20	21⅝	Boston, Mass	9.1	**William J Pruyn**
45,000	165,500	NYSE	EK	7.12	3.50	86	Rochester, NY	136.5	**Walter A Fallon**
17,233	28,772	NYSE	ETN	–6.74	1.72	32	Cleveland, Ohio	44.6	**E Mandell de Windt**
08,148	37,359	NYSE	ECK	1.90	0.93	24⅝	Largo, Fla	29.3	**Stewart Turley**
44,723	29,544	NYSE	EGG	1.38	0.32	28¼	Wellesley, Mass	18.1	**Bernard J O'Keefe**
32,733	49,910	NYSE	ELG	1.08	1.48	22¼	Houston, Tex	8.2	**Travis H Petty**
70,799	31,282	NASDAQ	ELPA	2.30	1.31	12¼	El Paso, Tex	1.1	**Evern R Wall**
58,306	28,923	NYSE	EDS	1.72	0.62	45	Dallas, Tex	11.6	**Morton H Meyerson**
02,396	68,565	NYSE	EMR	4.37	2.03	60½	St Louis, Mo	52.7	**Charles F Knight**
22,200	12,374	NYSE	EMH	6.53	2.45	45½	Farmington, Conn	30.8	**T Mitchell Ford**
02,353	26,857	NYSE	EC	2.41	0.56	32¼	Edison, NJ	7.9	**Irving D Isko**
01,015	50,428	NYSE	ENS	2.70	1.60	19	Dallas, Tex	21.9	**William C McCord**
21,741	21,657	NYSE	ETX	2.25	1.04	18¾	Houston, Tex	5.0	**Jackson C Hinds**
19,078	4,653	NYSE	EQK	0.54	none	6¼	Pittsburgh, Pa	2.3	**William E Bierer**
23,020	3,600	NASDAQ	EBNC	2.92	0.82	25¾	Baltimore, Md	2.7	**H Grant Hathaway**
05,515	14,641	NYSE	ESM	6.79	1.47	57¾	Chicago, Ill	30.7	**Donald P Kelly**
70,597	37,092	NYSE	EY	2.32	0.75	14¾	Richmond, Va	14.3	**Floyd D Gottwald Jr**
49,171	12,363	NYSE	EVY	–5.64	0.25	8⅜	Portland, Ore	14.7	**Monford A Orloff**
78,523	14,195	NYSE	XLO	3.25	1.54	26	Troy, Mich	14.1	**E Paul Casey**
56,211	866,006	NYSE	XON	4.82	3.00	29¾	New York, NY	173.0	**Clifton C Garvin Jr**
12,107	8,149	NASDAQ	FHFC	0.46	none	4¼	Milwaukee, Wisc	4.9	**Richard Y Fisher**
12,387	33,952	NASDAQ	FGRP	3.73	1.24	35¼	Los Angeles, Cal	11.9	**Richard G Lindsley**
42,657	8,193	NYSE	FFF	2.14	1.34	28¼	Memphis, Tenn	13.0	**R Lee Taylor II**
56,074	21,872	NYSE	FDX	3.70	none	74¼	Memphis, Tenn	10.1	**Frederick W Smith**
36,906	65,441	NYSE	FNM	–2.20	0.16	24½	Washington, DC	1.1	**David O Maxwell**
457,097	48,550	NYSE	FDS	4.79	2.05	47¼	Cincinnati, Ohio	124.6	**Howard Goldfeder**
40,878	5,174	NASDAQ	FICR	5.47	1.37	25¼	Philadelphia, Pa	2.9	**Raymond J Dempsey**
14,942	3,788	NYSE	FDU	0.46	2.80	27¾	Newark, NJ	2.9	**Peter Cartmell**
359,119	15,302	NYSE	FIN	2.40	0.45	25⅞	Los Angeles, Cal	1.4	**Charles W Knapp**
-35,791	4,333	NYSE	FSB	–2.22	none	5⅛	Santa Barbara, Cal	0.8	**David L Tilton**
3,478	4,212	NYSE	FFI	0.15	none	22⅛	Culver City, Cal	0.6	**William J Popejoy**
237,000	50,443	NYSE	FIR	0.04	0.60	18½	Akron, Ohio	69.0	**John J Nevin**
60,427	7,718	NASDAQ	FABC	4.32	1.64	26½	Montgomery, Ala	3.4	**Frank A Plummer**
23,273	6,465	NASDAQ	FATN	2.53	0.95	14¾	Nashville, Tenn	2.2	**Kenneth L Roberts**
40,117	6,498	NASDAQ	FMCH	3.76	1.05	20½	Richmond, Va	3.4	**C Coleman McGehee**
62,726	10,503	NYSE	FAC	3.61	0.91	20⅞	Atlanta, Ga	3.9	**Thomas R Williams**
205,649	14,847	NASDAQ	FBKS	7.66	2.64	35⅞	Minneapolis, Minn	10.0	**George H Dixon**
99,845	4,785	NASDAQ	FBOS	17.02	3.00	72½	New York, NY	1.8	**Peter T Buchanan**
–44,182	29,820	NYSE	FCF	–2.05	0.80	17⅞	Beverly Hills, Cal	2.3	**S Mark Taper**
295,917	40,729	NYSE	FNB	3.33	1.20	18⅛	Chicago, Ill	11.2	**Barry F Sullivan**
194,513	32,122	NYSE	FBT	3.52	1.20	22	Houston, Tex	8.3	**James A Elkins Jr**
19,285	2,868	NASDAQ	FEMP	4.44	0.85	24¼	Buffalo, NY	2.1	**Robert G Wilmers**

ll share data adjusted for stock splits and stock dividends through May 9, 1983.

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net ($
266	354	■	■	First Executive (Dec)	3,451,218	1,707,330	352,450	26
379	■	■	■	First Florida Banks (Dec)	2,501,933	271,503	177,491	29
403	■	■	■	First Hawaiian (Dec)	2,384,029	273,076	95,048	19
13	121	219	122	First Interstate Bancorp (Dec)	40,884,296	4,607,604	1,280,226	221
329	■	■	■	First Kentucky National (Dec)	2,853,198	323,438	160,623	25
268	■	■	■	First Maryland Bancorp (Dec)	3,447,013	398,288	102,317	23
424	■	■	■	First National Cincinnati (Dec)	2,238,886	245,780	163,125	24
186	■	■	■	First National State Bancorp (Dec)	4,867,790	464,534	180,781	34
■	465	■	■	First National Supermarkets (Mar)	200,894	1,201,258	42,123	4
498	■	■	■	First New Mexico Bankshare (Dec)	1,774,019	206,747	92,379	16
244	■	■	■	[15]First of America Bank (Dec)	3,820,043	442,585	80,162	20
277	■	■	■	First Oklahoma Bancorporation (Dec)	3,326,347	367,803	166,438	18
155	■	■	■	First Pennsylvania (Dec)	5,432,841	636,310	80,580	−26
200	■	■	460	First Security (Dec)	4,608,987	531,869	253,050	53
272	■	■	■	First Tennessee National (Dec)	3,392,116	391,590	156,095	26
132	■	■	■	First Union (Dec)	6,167,985	663,169	263,131	43
378	■	■	■	First United Bancorporation (Dec)	2,522,607	309,342	240,372	16
462	■	■	■	First Virginia Banks (Dec)	2,016,103	246,693	141,175	25
189	■	■	■	First Wisconsin (Dec)	4,836,179	572,776	127,988	29
■	444	■	■	Fischbach (Sept)	465,141	1,271,363	165,714	25
306	■	■	■	Flagship Banks (Dec)	3,094,966	346,213	187,427	24
204	■	■	■	[16]Fleet Financial Group (Dec)	4,535,572	546,823	211,761	39
■	169	■	■	Fleming Cos (Dec)	597,917	3,688,011	400,491	29
■	429	■	■	Flickinger (July)	182,515	1,337,491	92,055	10
263	■	■	■	Florida National Banks of Florida (Dec)	3,498,496	342,025	266,670	21
118	226	140	95	Florida Power & Light (Dec)	6,850,559	2,940,833	1,828,088	266
322	461	394	337	[17]Florida Progress (Dec)	2,914,856	1,213,671	727,719	82
196	64	182	191	Fluor (Oct)	4,700,990	7,335,724	1,529,210	152
339	182	277	193	FMC (Dec)	2,765,552	3,498,792	1,038,224	152
■	■	410	■	Food Town Stores (Dec)	212,909	947,073	685,256	21
32	6	36	■	Ford Motor (Dec)	21,955,600	37,067,200	4,680,822	−657
■	125	414	376	Foremost-McKesson (Mar)	1,384,799	4,492,782	672,779	73
■	■	220	297	Fort Howard Paper (Dec)	644,696	537,030	1,269,818	92
■	369	■	438	Foster Wheeler (Dec)	942,004	1,614,856	445,718	57
■	■	245	402	Freeport-McMoran (Dec)	1,657,558	747,888	1,143,253	65
■	331	■	■	Fruehauf (Dec)	1,495,092	1,852,353	347,390	−30
■	394	67	155	Gannett (Dec)	1,574,140	1,519,514	3,376,113	180
343	■	■	■	GATX (Dec)	2,737,700	951,424	306,837	27
■	■	315	356	GEICO (Dec)	1,563,799	816,470	879,737	77
405	■	■	■	Gelco (July)	2,372,855	959,947	246,930	29
■	■	489	486	General Cinema (Oct)	592,809	885,935	566,132	48
362	78	144	223	General Dynamics (Dec)	2,639,500	6,154,500	1,798,137	132
34	14	4	6	General Electric (Dec)	21,615,000	26,500,000	21,615,561	1,817
240	53	123	137	General Foods (Mar)	3,860,737	8,351,149	2,054,437	200
■	■	179	308	General Instrument (Feb)	772,215	957,059	1,554,837	90
352	100	99	115	General Mills (May)	2,701,700	5,312,100	2,464,556	225
12	3	5	13	General Motors (Dec)	41,362,600	60,025,600	19,446,716	962
167	272	■	■	General Public Utilities (Dec)	5,180,661	2,405,527	413,532	33
192	400	85	131	General Re (Dec)	4,741,300	1,497,700	2,871,045	206

■ Not on 500 list

[15]Formerly First American Bank.
[16]Formerly Industrial National
[17]Formerly Florida Power.

A Summary of the 500s' Rankings

Cash flow ($000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
06,222	25,175	NASDAQ	FEXC	1.05	none	14	Beverly Hills, Cal	0.4	**Fred Carr**
39,065	15,268	NASDAQ	FFBK	1.67	0.36	11⅝	Tampa, Fla	2.5	**A Bronson Thayer**
30,906	3,335	NASDAQ	FHWN	5.73	2.40	28½	Honolulu, Haw	2.1	**John D Bellinger**
47,985	40,804	NYSE	I	5.35	2.12	31⅜	Los Angeles, Cal	31.9	**Joseph J Pinola**
40,988	5,949	NASDAQ	FKYN	4.30	1.61	27	Louisville, Ky	2.7	**A Stevens Miles**
38,007	5,247	NASDAQ	FMDB	4.50	1.40	19½	Baltimore, Md	3.3	**J Owen Cole**
33,204	4,500	NASDAQ	FNAC	5.40	2.40	36¼	Cincinnati, Ohio	1.6	**William N Liggett**
50,272	5,785	NYSE	FNS	6.59	2.25	31¼	Newark, NJ	3.8	**Robert R Ferguson Jr**
15,032	2,905	NASDAQ	FOOD	1.58	0.02	14½	Maple Heights, Ohio	13.3	**Richard J Bogomolny**
26,140	4,452	NASDAQ	FNMB	3.74	1.04	20¾	Albuquerque, NM	1.8	**George S Jenks**
28,554	4,304	NASDAQ	FABK	4.13	1.32	18⅝	Kalamazoo, Mich	4.2	**James H Duncan**
52,074	9,719	NASDAQ	FOKL	1.87	0.60	17⅛	Oklahoma City, Okla	1.5	**Charles A Vose Jr**
12,724	16,116	NYSE	FPA	–1.66	none	5	Philadelphia, Pa	3.7	**George A Butler**
91,170	12,050	NASDAQ	FSCO	4.42	1.10	21	Salt Lake City, Utah	4.5	**Spencer F Eccles**
42,935	9,049	NASDAQ	FTEN	2.90	1.08	17¼	Memphis, Tenn	3.2	**Ronald A Terry**
68,149	10,072	NASDAQ	FUNC	4.31	1.18	26⅛	Charlotte, NC	4.8	**C Clifford Cameron**
39,853	5,463	NASDAQ	FBFW	2.94	1.28	44	Fort Worth, Tex	1.7	**Paul W Mason**
37,218	12,411	NYSE	FVB	2.00	0.62	11⅜	Falls Church, Va	3.1	**Thomas K Malone Jr**
53,539	4,231	NYSE	FWB	6.87	2.08	30¼	Milwaukee, Wisc	4.3	**Hal C Kuehl**
38,060	3,408	NYSE	FIS	7.59	2.10	48⅝	New York, NY	13.0	**Alfred R Manville**
36,482	8,149	NASDAQ	FLAG	2.78	1.10	23	Miami, Fla	3.8	**Philip F Searle**
70,162	6,138	NYSE	FLT	6.28	2.00	34½	Providence, RI	3.7	**J Terrence Murray**
49,161	17,604	NYSE	FLM	1.98	0.64	22¾	Oklahoma City, Okla	10.2	**Richard D Harrison**
17,428	3,230	NASDAQ	FLIC	3.15	0.84	28½	West Seneca, NY	6.7	**Jerry D Metcalf**
40,597	8,889	NASDAQ	FNBF	2.28	0.84	30	Jacksonville, Fla	3.8	**George C Whitner**
52,663	50,430	NYSE	FPL	4.77	3.28	36¼	Miami, Fla	12.3	**John J Hudiburg**
41,381	38,301	NYSE	FDP	2.20	1.83	19	St Petersburg, Fla	4.7	**Andrew H Hines Jr**
77,121	78,421	NYSE	FLR	1.94	0.80	19½	Irvine, Cal	43.6	**J Robert Fluor**
20,124	32,193	NYSE	FMC	4.56	1.65	32¼	Chicago, Ill	36.4	**Robert H Malott**
34,442	26,105	NASDAQ	FDTN	0.84	0.08	26¼	Salisbury, NC	7.6	**Ralph W Ketner**
96,500	120,407	NYSE	F	–5.46	none	38⅞	Dearborn, Mich	379.2	**Philip Caldwell**
16,782	16,715	NYSE	FOR	4.59	2.32	40¼	San Francisco, Cal	16.7	**Thomas E Drohan**
36,981	26,733	NYSE	FHP	3.43	1.08	47½	Green Bay, Wisc	4.2	**Paul J Schierl**
62,028	34,286	NYSE	FWC	1.67	0.44	13	Livingston, NJ	15.9	**Louis E Azzato**
343,484	69,817	NYSE	FTX	0.95	0.60	16⅜	New York, NY	5.1	**Paul W Douglas**
43,483	12,297	NYSE	FTR	–2.47	1.15	28¼	Detroit, Mich	24.6	**Robert D Rowan**
270,370	53,272	NYSE	GCI	3.39	1.72	63⅜	Rochester, NY	25.5	**Allen H Neuharth**
175,800	11,916	NYSE	GMT	2.22	2.40	25¾	Chicago, Ill	8.7	**James J Glasser**
76,165	20,459	NYSE	GEC	3.67	0.56	43	Washington, DC	4.0	**John J Byrne**
260,907	11,829	NYSE	GEL	2.51	1.12	20⅞	Eden Prairie, Minn	8.4	**N Bud Grossman**
88,235	19,438	NYSE	GCN	2.38	0.49	29⅛	Chestnut Hill, Mass	12.5	**Richard A Smith**
385,100	54,489	NYSE	GD	2.41	0.72	33	St Louis, Mo	79.8	**David S Lewis**
934,000	227,832	NYSE	GE	8.00	3.30	94⅞	Fairfield, Conn	367.0	**John F Welch Jr**
537,173	51,847	NYSE	GF	4.05	2.25	39⅝	White Plains, NY	58.5	**James L Ferguson**
145,959	31,253	NYSE	GRL	3.01	0.44	49¾	New York, NY	26.6	**Frank G Hickey**
367,300	50,555	NYSE	GIS	4.46	1.74	48¾	Minneapolis, Minn	73.6	**H Brewster Atwater Jr**
589,000	311,771	NYSE	GM	3.09	2.40	62⅜	Detroit, Mich	657.0	**Roger B Smith**
310,883	61,264	NYSE	GPU	0.55	none	6¾	Parsippany, NJ	12.2	**William G Kuhns**
322,000	45,036	NYSE	GRN	4.66	1.08	63¾	Greenwich, Conn	2.4	**Harold J Hudson Jr**

ll share data adjusted for stock splits and stock dividends through May 9, 1983

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net ($
■	366	225	264	General Signal (Dec)	1,221,580	1,622,136	1,259,193	107
■	309	401	■	General Tire & Rubber (Nov)	1,741,548	2,061,659	705,979	19
■	324	160	283	Genuine Parts (Dec)	783,580	1,936,524	1,635,788	100
169	98	92	468	Georgia-Pacific (Dec)	5,150,000	5,402,000	2,660,070	52
68	30	49	25	[1]Getty Oil (Dec)	11,404,245	12,761,646	3,837,902	688
■	332	■	■	Giant Food (Feb)	451,171	1,852,134	246,746	37
188	■	■	■	Gibraltar Financial Corp of Calif (Dec)	4,846,693	546,422	138,023	–26
249	■	■	■	Gibraltar Savings Association (Sept)	3,748,169	410,564	85,176	–22
■	292	205	219	Gillette (Dec)	1,667,230	2,238,979	1,369,530	135
■	■	■	325	Global Marine (Dec)	1,344,811	455,708	290,848	84
108	■	■	■	Golden West Financial (Dec)	7,268,692	799,289	321,641	–19
406	214	487	■	B F Goodrich (Dec)	2,371,049	3,005,328	567,071	–32
166	51	95	103	Goodyear Tire & Rubber (Dec)	5,193,547	8,688,672	2,594,970	247
■	361	161	296	Gould (Dec)	1,594,200	1,651,400	1,632,750	92
184	79	137	70	W R Grace (Dec)	4,915,665	6,127,553	1,848,063	319
■	■	369	475	W W Grainger (Dec)	520,371	803,228	767,511	50
■	120	■	■	Great Atlantic & Pacific Tea (Feb)	1,093,411	4,607,817	308,591	21
■	411	475	351	Great Northern Nekoosa (Dec)	1,481,832	1,429,654	584,655	78
59	424	374	■	Great Western Financial (Dec)	12,674,994	1,387,146	760,395	–74
223	110	379	271	[1]Greyhound (Dec)	4,056,623	4,993,891	750,806	106
■	316	485	■	Grumman (Dec)	999,234	2,003,244	568,192	25
31	31	21	17	[19]GTE (Dec)	22,293,550	12,066,410	7,490,543	835
69	73	218	167	[1]Gulf & Western Industries (July)	10,901,989	6,423,300	1,286,601	168
38	11	32	14	Gulf Oil (Dec)	20,436,000	28,427,000	5,149,785	900
246	433	289	169	Gulf States Utilities (Dec)	3,806,111	1,307,259	990,419	165
286	466	365	291	Gulf United (Dec)	3,248,439	1,197,561	774,937	94
149	66	43	37	Halliburton (Dec)	5,581,504	7,281,793	4,177,080	496
■	422	■	■	Hammermill Paper (Dec)	993,691	1,395,950	266,000	30
112	■	■	■	Harris Bankcorp (Dec)	7,136,793	917,931	216,641	35
■	351	241	366	Harris Corp (June)	1,417,866	1,719,028	1,164,649	75
218	■	■	■	Hartford National (Dec)	4,127,897	389,600	151,900	24
■	■	■	500	G Heileman Brewing (Dec)	502,046	870,841	522,901	45
441	168	133	144	H J Heinz (Apr)	2,129,570	3,688,500	1,912,887	192
121	■	■	■	Walter E Heller International (Dec)	6,647,218	886,125	275,494	16
■	■	■	365	Helmerich & Payne (Sept)	616,184	338,157	490,484	75
469	262	227	316	Hercules (Dec)	2,001,354	2,468,971	1,232,462	86
■	384	313	293	Hershey Foods (Dec)	888,071	1,565,736	883,340	94
265	136	15	54	Hewlett-Packard (Oct)	3,470,000	4,254,000	9,160,989	383
■	■	237	331	Hilton Hotels (Dec)	938,321	599,519	1,193,841	83
■	415	207	364	Holiday Inns (Dec)	1,708,007	1,425,298	1,361,791	75
■	■	291	■	Homestake Mining (Dec)	382,397	172,151	972,126	17
208	97	132	93	Honeywell (Dec)	4,470,900	5,490,400	1,940,403	271
■	414	■	■	George A Hormel (Oct)	488,859	1,426,596	270,197	28
258	218	62	163	Hospital Corp of America (Dec)	3,601,143	2,976,912	3,423,863	171
480	■	■	■	Hospital Trust (Dec)	1,929,892	240,149	60,477	6
90	57	256	237	Household International (Dec)	8,235,100	7,767,500	1,101,562	125
148	160	170	235	Houston Industries (Dec)	5,672,036	3,838,346	1,603,580	126
364	204	194	96	Houston Natural Gas (July)	2,634,507	3,180,718	1,457,814	262
409	373	230	199	Hughes Tool (Dec)	2,360,946	1,595,945	1,221,366	147

■ Not on 500 list

[1]Figures include unconsolidated subsidiaries.
[18]Office jointly held with Marion O. Sandler.
[19]Formerly General Telephone & Electronics.

A Summary of the 500s' Rankings

Cash flow ($000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
3,168	28,060	NYSE	GSX	3.85	1.60	44⅞	Stamford, Conn	24.8	Nathan R Owen
9,689	24,514	NYSE	GY	0.80	1.46	28⅞	Akron, Ohio	34.0	Michael G O'Neil
5,114	36,150	NYSE	GPC	2.77	1.26	45¼	Atlanta, Ga	12.2	Wilton Looney
3,000	101,336	NYSE	GP	0.48	1.05	26¼	Atlanta, Ga	44.0	T Marshall Hahn Jr
0,316	79,132	NYSE	GET	8.57	2.55	48½	Los Angeles, Cal	19.4	Sidney R Petersen
0,748	14,622	ASE	GFS A	2.53	0.43	16⅞	Washington, DC	14.8	Israel Cohen
4,486	13,977	NYSE	GFC	–1.91	none	9⅞	Beverly Hills, Cal	1.3	Herbert J Young
2,558	7,098	NASDAQ	GSTX	–3.20	none	12	Houston, Tex	0.6	E Michael Lallinger
9,989	30,434	NYSE	GS	4.45	2.20	45	Boston, Mass	31.3	Colman M Mockler Jr
3,564	31,443	NYSE	GLM	2.71	0.22	9¼	Houston, Tex	2.7	C Russell Luigs
15,518	20,585	NYSE	GDW	–0.97	0.02	15⅝	Oakland, Cal	1.7	[18]Herbert M Sandler
48,300	17,652	NYSE	GR	–2.43	1.56	32⅛	Akron, Ohio	31.9	John D Ong
26,500	74,142	NYSE	GT	3.35	1.40	35	Akron, Ohio	131.1	Robert E Mercer
52,900	43,540	NYSE	GLD	2.15	1.72	37½	Rolling Meadows, Ill	25.0	William T Ylvisaker
02,587	48,158	NYSE	GRA	6.62	2.70	38⅜	New York, NY	85.6	J Peter Grace
78,072	14,346	NYSE	GWW	3.50	1.14	53½	Skokie, Ill	5.7	David W Grainger
85,475	37,405	NYSE	GAP	0.57	none	8¼	Montvale, NJ	42.5	James Wood
79,537	16,297	NYSE	GNN	4.82	2.00	35⅞	Stamford, Conn	12.2	Robert Hellendale
35,103	27,777	NYSE	GWF	–2.68	0.52	27⅜	Beverly Hills, Cal	3.2	James F Montgomery
45,868	43,525	NYSE	G	2.41	1.20	17¼	Phoenix, Ariz	47.2	John W Teets
69,203	11,776	NYSE	GQ	1.79	1.45	48¼	Bethpage, NY	28.0	John C Bierwirth
42,823	180,495	NYSE	GTE	4.70	2.86	41½	Stamford, Conn	200.0	Theodore F Brophy
68,859	76,812	NYSE	GW	2.17	0.75	16¾	New York, NY	114.5	Martin S Davis
79,000	173,102	NYSE	GO	4.98	2.80	29¾	Pittsburgh, Pa	55.0	James E Lee
46,039	74,050	NYSE	GSU	1.95	1.56	13⅜	Beaumont, Tex	4.7	Paul W Murrill
47,189	28,052	NYSE	GHC	3.11	1.32	27⅝	Jacksonville, Fla	3.8	E Grant Fitts
72,729	118,080	NYSE	HAL	4.21	1.60	35⅜	Dallas, Tex	96.5	John P Harbin
00,584	8,512	NYSE	HML	3.07	1.84	31¼	Erie, Pa	12.3	Albert F Duval
60,087	6,615	NYSE	HBC	5.42	2.20	32¾	Chicago, Ill	3.8	Charles M Bliss
82,608	31,477	NYSE	HRS	2.42	0.88	37	Melbourne, Fla	26.1	Joseph A Boyd
38,153	5,600	NASDAQ	HNAT	4.46	1.85	27⅛	Hartford, Conn	3.7	Robert L Newell
80,283	13,238	NYSE	GHB	3.45	0.80	39½	La Crosse, Wisc	5.7	Russell G Cleary
53,208	47,378	NYSE	HNZ	4.10	1.48	40⅜	Pittsburgh, Pa	42.0	Anthony J F O'Reilly
37,931	11,978	NYSE	HLR	1.34	1.30	23	Chicago, Ill	4.9	Franklin A Cole
26,478	25,153	NYSE	HP	2.98	0.29	19½	Tulsa, Okla	1.5	Walter H Helmerich III
82,727	44,614	NYSE	HPC	1.97	1.32	27⅝	Wilmington, Del	22.2	Alexander F Giacco
38,613	15,669	NYSE	HSY	6.01	2.00	56⅜	Hershey, Pa	13.0	William E C Dearden
540,000	125,493	NYSE	HWP	3.05	0.24	73	Palo Alto, Cal	66.0	John A Young
30,862	26,678	NYSE	HLT	3.12	1.80	44¾	Beverly Hills, Cal	32.5	Barron Hilton
338,701	37,182	NYSE	HIA	1.94	0.79	36⅝	Memphis, Tenn	42.7	Michael D Rose
33,966	35,110	NYSE	HM	0.51	0.20	27¾	San Francisco, Cal	2.6	Harry M Conger
579,200	22,728	NYSE	HON	12.09	3.50	85⅜	Minneapolis, Minn	95.5	Edson W Spencer
62,909	9,607	ASE	HRL	2.92	0.96	28⅛	Austin, Minn	7.4	Richard L Knowlton
388,184	82,253	NYSE	HCA	2.25	0.32	41¾	Nashville, Tenn	80.0	Thomas F Frist Jr
22,849	2,122	NASDAQ	HTCO	3.18	2.32	28½	Providence, RI	1.9	Henry S Woodbridge Jr
442,500	47,894	NYSE	HI	2.06	1.65	23	Prospect Heights, Ill	86.0	Donald C Clark
504,562	80,179	NYSE	HOU	1.62	2.16	20	Houston, Tex	10.1	Don D Jordan
438,683	40,778	NYSE	HNG	6.46	1.65	35¾	Houston, Tex	11.8	M D Matthews
297,529	55,203	NYSE	HT	2.65	0.80	22⅛	Houston, Tex	17.5	James R Lesch

ll share data adjusted for stock splits and stock dividends through May 9, 1983.

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net ($
500	396	88	232	Humana (Aug)	1,745,170	1,516,311	2,685,601	127
165	■	■	■	Huntington Bancshares (Dec)	5,244,858	438,454	139,075	29
104	372	417	340	E F Hutton Group (Dec)	7,364,740	1,596,487	666,090	81
229	159	■	490	IC Industries (Dec)	3,952,400	3,861,700	474,250	47
■	■	■	345	Idaho Power (Dec)	1,438,372	367,794	454,020	80
307	498	253	184	Illinois Power (Dec)	3,092,522	1,106,775	1,112,878	156
163	■	■	■	Imperial Corp of America (Dec)	5,271,257	549,170	184,548	–61
351	■	■	■	Indiana National (Dec)	2,702,229	305,440	87,544	18
■	■	■	430	Indianapolis Power & Light (Dec)	1,185,167	397,594	412,594	58
490	■	■	■	Industrial Valley Bank & Trust (Dec)	1,841,597	227,279	60,584	10
399	240	361	466	Ingersoll-Rand (Dec)	2,402,718	2,774,725	783,009	52
366	238	471	■	Inland Steel (Dec)	2,628,750	2,807,602	588,874	–133
■	■	149	■	Intel (Dec)	1,056,452	899,812	1,757,778	30
■	255	314	323	Interco (Feb)	1,554,975	2,566,606	879,986	85
36	269	224	129	InterFirst (Dec)	21,030,401	2,416,217	1,260,636	206
20	7	1	2	International Business Machines (Dec)	32,541,000	34,364,000	57,981,578	4,409
■	■	286	413	International Flavors & Fragrances (Dec)	431,589	447,889	1,009,970	63
252	134	■	■	International Harvester (Oct)	3,698,784	4,292,304	137,241	–1,660
477	386	324	212	International Minerals & Chemical (June)	1,941,900	1,560,400	852,084	137
■	481	■	■	International Multifoods (Feb)	480,585	1,147,659	247,569	33
150	150	103	173	International Paper (Dec)	5,566,200	4,015,200	2,387,887	160
22	16	44	26	[1]International Tel & Tel (Dec)	29,171,858	21,921,779	4,161,625	685
228	142	239	220	InterNorth (Dec)	3,954,058	4,158,986	1,182,671	135
278	■	■	■	[20]IntraWest Financial (Dec)	3,314,069	400,169	159,180	–11
■	■	■	451	Iowa-Illinois Gas & Electric (Dec)	1,033,781	474,633	256,432	54
41	286	■	341	Irving Bank (Dec)	19,514,285	2,276,830	358,240	81
■	308	■	■	IU International (Dec)	1,281,838	2,070,093	342,909	33
302	■	450	322	Jefferson-Pilot (Dec)	3,130,460	923,218	632,687	86
■	91	477	312	Jewel Cos (Jan)	1,474,805	5,571,721	581,350	88
375	326	461	■	Jim Walter (Aug)	2,562,799	1,925,161	609,866	6
214	87	14	34	Johnson & Johnson (Dec)	4,209,600	5,760,900	9,385,427	523
■	450	■	455	Johnson Controls (Sept)	861,204	1,251,522	466,632	53
■	■	■	330	Joy Manufacturing (Sept)	847,914	1,080,845	463,570	83
106	22	87	97	K mart (Jan)	7,343,665	16,772,166	2,738,868	261
256	230	428	■	Kaiser Aluminum & Chemical (Dec)	3,644,400	2,911,500	652,069	–115
■	■	■	409	Kaneb Services (Dec)	877,505	595,617	356,820	64
496	■	■	342	Kansas City Power & Light (Dec)	1,792,227	485,629	450,827	80
■	■	■	326	Kansas Gas & Electric (Dec)	1,515,517	350,937	485,339	84
■	■	■	411	Kansas Power & Light (Dec)	1,227,153	481,519	382,840	64
■	277	125	113	Kellogg (Dec)	1,297,354	2,367,115	2,035,428	227
131	319	■	369	Kemper (Dec)	6,174,213	1,985,097	542,354	74
■	■	■	452	Kentucky Utilities (Dec)	1,248,138	476,783	354,047	54
247	163	185	126	Kerr-McGee (Dec)	3,762,618	3,777,190	1,517,195	209
337	■	■	■	Key Banks (Dec)	2,794,718	293,460	116,849	25
■	■	397	■	Key Pharmaceuticals (Dec)	61,989	82,314	723,156	12
484	248	■	329	Kidde (Dec)	1,908,688	2,655,335	469,342	84
357	224	158	138	Kimberly-Clark (Dec)	2,663,600	2,946,100	1,660,710	197
■	430	167	281	Knight-Ridder Newspapers (Dec)	1,051,286	1,327,657	1,614,542	102
■	380	■	■	Koppers (Dec)	1,192,924	1,585,206	446,576	–38

■ Not on 500 list.

[1]Figures include unconsolidated subsidiaries.

[20]Formerly First National Bancorp.

A Summary of the 500s' Rankings

Cash flow ($000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
26,669	79,571	NYSE	HUM	1.61	0.45	33⅞	Louisville, Ky	39.8	David A Jones
45,779	5,563	NASDAQ	HBAN	5.27	1.38	25	Columbus, Ohio	3.8	Frank Wobst
73,511	22,203	NYSE	EFH	3.46	0.64	30	New York, NY	12.6	Robert Fomon
39,900	13,550	NYSE	ICX	2.03	2.24	35	Chicago, Ill	47.6	William B Johnson
54,934	15,792	NYSE	IDA	4.71	2.76	28¾	Boise, Ida	1.6	James E Bruce
36,083	46,858	NYSE	IPC	3.04	2.48	23¾	Decatur, Ill	4.0	Wendell J Kelley
55,125	14,196	NYSE	ICA	–4.30	none	13	San Diego, Cal	1.6	Matthew J Shevlin
34,768	5,075	NASDAQ	INAT	3.75	1.20	17¼	Indianapolis, Ind	2.2	Thomas M Miller
99,224	15,869	NYSE	IPL	3.41	2.55	26	Indianapolis, Ind	2.2	Zane G Todd
23,427	2,851	NASDAQ	IBKT	2.70	2.20	21¼	Jenkintown, Pa	1.8	Joseph A Gallagher
29,394	19,823	NYSE	IR	2.35	3.32	39½	Woodcliff Lake, NJ	41.1	Thomas A Holmes
65,801	22,649	NYSE	IAD	–6.27	1.13	26	Chicago, Ill	31.0	Frank W Luerssen
35,570	45,362	NASDAQ	INTC	0.65	none	38¾	Santa Clara, Cal	18.1	Gordon E Moore
36,896	14,426	NYSE	ISS	5.24	2.88	61	St Louis, Mo	52.8	John K Riedy
22,000	54,514	NYSE	IFC	3.80	1.18	23⅛	Dallas, Tex	8.5	Elvis L Mason
98,000	602,406	NYSE	IBM	7.39	3.44	96¼	Armonk, NY	359.9	John R Opel
78,061	36,560	NYSE	IFF	1.73	1.01	27⅝	New York, NY	3.6	Henry G Walter Jr
07,005	32,292	NYSE	HR	–52.07	none	4¼	Chicago, Ill	54.5	Donald D Lennox
79,000	26,524	NYSE	IGL	5.13	2.60	32⅛	Northbrook, Ill	9.5	Richard A Lenon
44,925	8,117	NYSE	IMC	4.07	1.54	30½	Minneapolis, Minn	7.8	William G Phillips
51,200	49,362	NYSE	IP	2.72	2.40	48⅜	New York, NY	34.9	Edwin A Gee
31,916	133,172	NYSE	ITT	4.63	2.68	31¼	New York, NY	303.5	Rand V Araskog
59,215	44,212	NYSE	INI	3.01	2.12	26¾	Omaha, Neb	10.8	Sam F Segnar
63,547	5,685	NASDAQ	INTW	–2.11	1.40	28	Denver, Colo	2.8	Theodore D Brown
01,720	11,656	NYSE	IWG	3.95	2.36	22	Davenport, Iowa	1.6	Dean R Stichnoth
29,429	8,711	NYSE	V	9.13	3.36	41⅛	New York, NY	9.7	Gordon T Wallis
11,319	20,941	NYSE	IU	1.44	1.13	16⅜	Wilmington, Del	35.0	John Gilray Christy
35,545	21,447	NYSE	JP	4.02	1.64	29½	Greensboro, NC	6.0	W Roger Soles
61,824	11,627	NYSE	JWL	6.82	2.42	50	Chicago, Ill	37.2	Weston R Christopherson
6,405	16,595	NYSE	JWC	0.29	1.00	36¾	Tampa, Fla	20.9	James W Walter
768,100	189,127	NYSE	JNJ	2.79	0.97	49⅝	New Brunswick, NJ	78.4	James E Burke
107,319	13,191	NYSE	JCI	3.83	1.43	35⅜	Milwaukee, Wisc	20.3	Fred L Brengel
124,527	19,622	NYSE	JOY	4.27	1.40	23⅝	Pittsburgh, Pa	11.9	Alexander W Calder
576,700	124,494	NYSE	KM	2.06	0.99	22	Troy, Mich	245.0	Bernard M Fauber
14,000	43,112	NYSE	KLU	–2.68	0.80	15⅛	Oakland, Cal	20.7	Cornell C Maier
144,697	23,788	NYSE	KAB	2.62	1.00	15	Houston, Tex	5.4	Michael G Shoup
86,416	16,246	NYSE	KLT	4.18	3.01	27¾	Kansas City, Mo	2.7	Arthur J Doyle
54,934	26,413	NYSE	KGE	3.00	2.15	18⅜	Wichita, Kan	1.8	Wilson K Cadman
107,292	15,869	NYSE	KAN	3.60	2.35	24⅛	Topeka, Kan	2.3	William E Wall
310,797	76,448	NYSE	K	2.98	1.53	26⅝	Battle Creek, Mich	19.3	William E Lamothe
411,330	14,367	NASDAQ	KEMC	5.30	1.80	37¾	Long Grove, Ill	14.1	Joseph E Luecke
115,609	16,278	NYSE	KU	2.78	2.20	21¾	Lexington, Ky	1.9	William B Bechanan
583,479	52,772	NYSE	KMG	3.98	1.10	28¾	Oklahoma City, Okla	10.5	Dean A McGee
37,430	7,419	NASDAQ	KEYB	3.50	1.32	15¾	Albany, NY	3.0	Victor J Riley Jr
14,976	23,141	ASE	KPH	0.51	0.08	31¼	Miami, Fla	0.8	Michael Jaharis Jr
140,788	19,972	NYSE	KDE	4.02	1.10	23½	Clifton, NJ	45.0	Fred R Sullivan
293,700	22,480	NYSE	KMB	8.83	3.90	73⅞	Neenah, Wisc	32.1	Darwin E Smith
161,885	32,617	NYSE	KRN	3.14	0.92	49½	Miami, Fla	19.7	Alvah H Chapman Jr
106,199	27,911	NYSE	KOP	–1.67	1.40	16	Pittsburgh, Pa	17.3	Charles R Pullin

ll share data adjusted for stock splits and stock dividends through May 9, 1983

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net ($
76	485	435	282	**Mercantile Texas (Dec)**	10,190,043	1,141,998	645,619	10
472	■	■	■	**Merchants National (Dec)**	1,981,321	262,667	43,882	7
255	211	24	47	**Merck (Dec)**	3,647,652	3,063,017	6,257,088	415
37	108	104	79	**Merrill Lynch (Dec)**	20,697,239	5,026,201	2,341,320	308
■	■	360	230	**Mesa Petroleum (Dec)**	1,667,230	374,884	785,041	129
■	■	341	78	**Metromedia (Dec)**	1,039,618	407,074	827,616	309
123	■	■	■	**Michigan National (Dec)**	6,504,137	788,725	148,023	4
363	191	375	224	**MidCon (Sept)**	2,639,051	3,337,430	759,805	132
74	231	120	74	**Middle South Utilities (Dec)**	10,364,653	2,901,730	2,072,593	310
211	■	■	■	**Midlantic Banks (Dec)**	4,338,734	464,541	138,595	38
153	71	16	28	**Minnesota Mining & Manufacturing (Dec)**	5,514,000	6,601,000	8,841,825	631
■	■	■	483	**Minnesota Power (Dec)**	1,016,011	364,394	290,106	48
■	■	■	488	**Mission Insurance Group (Dec)**	893,964	427,776	333,032	47
486	■	391	343	**Mitchell Energy & Development (Jan)**	1,874,887	961,713	736,755	80
18	4	12	9	**Mobil (Dec)**	36,439,000	59,946,000	10,204,418	1,380
134	74	79	68	**Monsanto (Dec)**	6,077,000	6,325,000	3,095,598	329
■	■	■	386	**Montana Power (Dec)**	1,516,629	497,589	445,826	70
408	■	■	■	**Moore Financial Group (Dec)**	2,361,435	272,687	129,171	22
8	67	90	51	**J P Morgan (Dec)**	58,597,000	6,885,300	2,672,933	394
■	278	■	■	**Morrison-Knudsen (Dec)**	893,273	2,360,909	237,990	39
■	■	337	215	**[21]Morton Thiokol (June)**	746,935	786,976	833,959	136
333	162	70	165	**Motorola (Dec)**	2,833,194	3,785,847	3,331,491	169
■	■	■	484	**Mountain Fuel Supply (Dec)**	849,267	510,340	271,200	48
318	252	323	179	**Murphy Oil (Dec)**	2,989,523	2,602,455	852,136	157
253	83	96	73	**Nabisco Brands (Dec)**	3,691,600	5,871,100	2,556,808	314
■	■	243	433	**Nalco Chemical (Dec)**	464,868	643,863	1,151,503	58
■	492	■	■	**Nash Finch (Dec)**	178,500	1,117,714	57,392	11
497	■	■	■	**National Bancshares Corp of Texas (Dec)**	1,785,183	208,319	146,947	16
■	389	■	■	**National Can (Dec)**	785,016	1,541,543	212,635	34
386	■	■	■	**National Central Financial (Dec)**	2,459,477	282,853	159,155	19
119	■	■	■	**National City (Dec)**	6,823,425	661,404	243,776	43
■	399	353	347	**National Distillers & Chemical (Dec)**	1,708,415	1,499,037	795,760	79
■	471	188	368	**National Medical Enterprises (May)**	1,203,194	1,167,073	1,498,743	79
■	499	■	■	**National Semiconductor (May)**	785,042	1,104,095	515,746	–10
■	■	■	472	**National Service Industries (Aug)**	427,815	884,859	461,888	50
82	154	■	■	**[1]National Steel (Dec)**	9,577,573	3,903,213	326,270	–465
221	■	■	■	**Nationwide (Dec)**	4,087,131	701,715	416,502	28
334	368	326	■	**Natomas (Dec)**	2,832,909	1,617,200	846,966	44
60	417	■	338	**NBD Bancorp (Dec)**	12,406,937	1,406,464	366,358	81
67	■	■	363	**NCNB (Dec)**	11,559,531	1,072,846	452,700	76
273	179	106	106	**NCR (Dec)**	3,373,046	3,526,217	2,299,984	234
390	462	358	261	**New England Electric System (Dec)**	2,451,488	1,212,649	787,360	108
350	■	321	200	**New York State Electric & Gas (Dec)**	2,702,360	889,223	858,275	145
■	■	388	454	**New York Times (Dec)**	761,479	933,692	739,956	54
476	■	189	482	**Newmont Mining (Dec)**	1,946,750	711,605	1,493,140	48
193	274	192	94	**Niagara Mohawk Power (Dec)**	4,736,295	2,393,771	1,466,125	268
367	301	408	319	**NICOR (Dec)**	2,628,235	2,166,085	692,476	86
■	■	364	■	**A C Nielsen (Aug)**	441,553	643,826	777,401	44
■	■	331	478	**NIKE (May)**	375,473	693,582	840,968	49

■ Not on 500 list.

[1]Figures include unconsolidated subsidiaries.

[21]Formerly Morton-Norwich.

A Summary of the 500s' Rankings

Cash flow ($000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
50,288	24,595	NYSE	MTD	4.15	1.12	26¼	Dallas, Tex	6.1	Gene H Bishop
18,788	2,167	NASDAQ	MCHN	3.51	1.00	20¼	Indianapolis, Ind	1.5	Otto N Frenzel III
23,439	73,939	NYSE	MRK	5.61	2.80	84⅝	Rahway, NJ	32.2	John J Horan
28,316	39,022	NYSE	MER	7.59	1.32	60	New York, NY	37.2	Roger E Birk
92,272	66,812	NYSE	MSA	1.72	0.20	11¾	Amarillo, Tex	0.9	T Boone Pickens Jr
53,864	2,796	NYSE	MET	83.11	5.00	296	Secaucus, NJ	3.8	John W Kluge
36,122	11,102	NASDAQ	MNCO	0.30	1.14	13⅜	Bloomfield Hills, Mich	7.6	Stanford C Stoddard
77,135	29,507	NYSE	MCN	4.50	2.10	25¾	Chicago, Ill	4.8	Orval C Davis
40,989	139,334	NYSE	MSU	2.33	1.66	14⅞	New Orleans, La	13.6	Floyd W Lewis
54,014	4,906	NASDAQ	MIDL	7.74	1.79	28¼	Edison, NJ	3.7	Robert Van Buren
03,000	117,891	NYSE	MMM	5.37	3.20	75	St Paul, Minn	89.4	Lewis W Lehr
05,697	12,215	NYSE	MPL	3.51	2.28	23¾	Duluth, Minn	1.6	Jack F Rowe
16,238	11,894	NYSE	MEQ	4.01	0.77	28	Los Angeles, Cal	2.3	E Richard DeRosa
37,312	47,919	ASE	MND	1.68	0.24	15⅜	The Woodlands, Tex	3.7	George P Mitchell
47,000	406,146	NYSE	MOB	3.31	2.00	25⅛	New York, NY	197.2	Rawleigh Warner Jr
80,000	40,598	NYSE	MTC	8.21	3.95	76¼	St Louis, Mo	54.8	John W Hanley
87,636	17,230	NYSE	MTP	3.97	2.48	25⅞	Butte, Mont	2.7	W Paul Schmechtel
41,316	6,151	NASDAQ	MFGI	3.73	1.11	21	Boise, Ida	2.3	Thomas C Frye
42,000	39,599	NYSE	JPM	9.53	3.40	67½	New York, NY	12.4	Lewis T Preston
03,955	9,814	NYSE	MRN	3.86	1.27	24¼	Boise, Ida	25.7	William H McMurren
84,182	16,763	NYSE	MTI	10.13	1.54	49¾	Chicago, Ill	7.1	Charles S Locke
29,554	38,293	NYSE	MOT	4.64	1.60	87	Schaumburg, Ill	79.8	Robert W Galvin
17,701	7,721	NYSE	MFS	5.57	2.48	35⅛	Salt Lake City, Utah	2.8	R D Cash
46,894	36,651	NYSE	MUR	4.28	1.00	23¼	El Dorado, Ark	5.4	Charles H Murphy Jr
45,800	69,573	NYSE	NB	4.83	2.00	36¾	Parsippany, NJ	57.8	Robert M Schaeberle
95,099	39,707	NYSE	NLC	1.46	1.12	29	Oak Brook, Ill	4.7	Worley H Clark
23,062	3,376	OTC	–	3.40	1.35	17	St Louis Park, Minn	5.0	Thomas A Riley
30,997	6,389	NASDAQ	NBAN	2.51	0.78	23	San Antonio, Tex	1.5	Richard W Calvert
73,198	9,245	NYSE	NAC	3.35	1.00	23	Chicago, Ill	10.7	Frank W Considine
30,583	4,580	NASDAQ	NCFC	4.31	1.56	34¾	Lancaster, Pa	1.9	Wilson D McElhinny
64,499	7,618	NASDAQ	NCTY	5.62	2.75	32	Cleveland, Ohio	3.7	Julien L McCall
35,139	32,480	NYSE	DR	2.15	2.20	24½	New York, NY	11.4	Drummond C Bell
35,647	64,601	NYSE	NME	1.28	0.34	23¼	Los Angeles, Cal	34.2	Richard K Eamer
52,493	23,443	NYSE	NSM	–0.47	none	22	Santa Clara, Cal	37.0	Charles E Sporck
74,186	12,317	NYSE	NAS	4.08	1.48	37½	Atlanta, Ga	16.9	Erwin Zaban
97,538	18,644	NYSE	NS	–24.91	1.50	17½	Pittsburgh, Pa	26.9	Howard M Love
219,903	10,284	NASDAQ	NWDCA	2.80	0.70	40½	Columbus, Ohio	1.5	John E Fisher
510,306	52,121	NYSE	NOM	0.65	1.40	16¼	San Francisco, Cal	5.1	Dorman L Commons
125,139	12,111	NYSE	NBD	6.69	2.08	30¼	Detroit, Mich	6.8	Charles T Fisher III
127,195	24,144	NYSE	NCB	3.18	0.91	18¾	Charlotte, NC	6.4	Thomas I Storrs
530,325	26,744	NYSE	NCR	8.75	2.35	86	Dayton, Ohio	64.0	Charles E Exley Jr
201,515	23,680	NYSE	NES	4.65	2.90	33¼	Westborough, Mass	5.2	Guy W Nichols
184,949	39,689	NYSE	NGE	3.36	2.10	21⅝	Binghamton, NY	4.4	Charles F Kennedy
122,646	12,925	ASE	NYT A	4.31	1.13	57¼	New York, NY	8.1	Arthur O Sulzberger
89,040	27,148	NYSE	NEM	1.76	1.15	55	New York, NY	11.2	Plato Malozemoff
377,087	93,832	NYSE	NMK	2.64	1.76	15⅝	Syracuse, NY	10.1	John G Haehl Jr
305,582	25,067	NYSE	GAS	3.30	2.96	27⅝	Naperville, Ill	5.8	Clarence J Gauthier
70,730	22,452	NASDAQ	NIELA	1.97	0.57	34⅝	Northbrook, Ill	20.6	Arthur C Nielsen Jr
54,545	37,272	NASDAQ	NIKE	1.37	none	22⅝	Beaverton, Ore	3.2	Philip H. Knight

ll share data adjusted for stock splits and stock dividends through May 9, 1983.

SUPPLY LINE.

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CSX

CORPORATION

America's Largest Transportation And Natural Resource Company.

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net pro ($00
420	295	249	147	NL Industries (Dec)	2,283,629	2,213,520	1,134,969	188,78
■	■	445	389	Noble Affiliates (Dec)	708,478	397,917	635,308	70,26
120	189	61	50	Norfolk Southern (Dec)	6,803,415	3,358,996	3,437,862	411,36
254	■	■	■	Norstar Bancorp (Dec)	3,652,951	385,096	256,448	44,40
492	206	427	375	North American Philips (Dec)	1,825,848	3,168,052	654,460	73,56
224	346	264	194	Northeast Utilities (Dec)	4,028,639	1,763,220	1,085,163	151,24
267	349	389	395	Northern Indiana Public Service (Dec)	3,449,809	1,732,728	739,345	69,03
296	385	310	180	Northern States Power (Dec)	3,196,889	1,560,916	907,110	157,65
128	■	■	■	Northern Trust (Dec)	6,252,733	826,433	218,340	32,51
■	261	246	■	Northrop (Dec)	1,352,500	2,472,900	1,142,007	5,40
■	329	285	■	Northwest Airlines (Dec)	1,377,387	1,877,568	1,018,866	5,01
45	305	419	310	Northwest Bancorporation (Dec)	17,584,679	2,080,524	663,989	89,09
394	371	■	■	Northwest Energy (Dec)	2,413,505	1,601,832	279,718	38,20
468	283	399	150	Northwest Industries (Dec)	2,002,000	2,306,600	707,814	184,60
443	■	■	■	Northwestern Financial (Dec)	2,116,719	282,148	99,665	8,94
■	445	488	■	Norton (Dec)	1,007,949	1,264,070	566,533	19,32
432	222	491	348	Norton Simon (June)	2,193,173	2,952,674	564,840	79,09
53	19	134	185	Occidental Petroleum (Dec)	15,772,492	18,212,226	1,893,156	155,60
■	297	■	431	Ogden (Dec)	1,691,884	2,202,244	529,312	58,47
■	■	■	439	Ohio Casualty (Dec)	1,573,672	888,803	493,363	57,02
164	412	210	143	Ohio Edison (Dec)	5,247,138	1,429,626	1,345,148	195,57
465	■	385	275	Oklahoma Gas & Electric (Dec)	2,013,754	907,561	744,310	105,08
411	■	■	■	Old Kent Financial (Dec)	2,352,659	274,482	107,938	22,6
439	■	■	■	Old Stone (Dec)	2,135,934	263,527	46,552	13,62
■	338	■	458	Olin (Dec)	1,636,027	1,823,137	555,493	53,30
■	490	■	444	Oneok (Aug)	998,702	1,119,321	321,124	56,09
■	■	■	422	Overseas Shipholding Group (Dec)	1,276,493	324,612	400,133	60,62
■	276	279	■	Owens-Corning Fiberglas (Dec)	1,597,914	2,373,478	1,037,325	29,61
316	174	372	■	Owens-Illinois (Dec)	2,995,800	3,590,900	761,112	39,70
■	457	384	■	PACCAR (Dec)	806,719	1,229,916	745,843	37,29
55	68	47	20	Pacific Gas & Electric (Dec)	13,635,318	6,785,095	4,001,119	810,1
284	130	366	231	Pacific Lighting (Dec)	3,257,079	4,359,072	771,942	128,8
209	418	240	139	Pacific Power & Light (Dec)	4,411,989	1,405,798	1,172,269	197,3
■	456	■	■	Pacific Resources (Dec)	542,636	1,234,809	95,008	9,7
212	500	499	■	Paine Webber (Sept)	4,295,112	1,099,814	558,149	35,2
■	■	433	■	Pall (July)	199,878	195,519	647,766	24,9
353	166	■	■	Pan American World Airways (Dec)	2,696,152	3,716,025	297,123	–485,3
177	186	260	124	Panhandle Eastern (Dec)	5,060,625	3,391,465	1,087,433	219,8
■	■	■	359	Parker Drilling (Aug)	928,294	615,861	292,440	76,3
■	480	■	436	Parker-Hannifin (June)	798,550	1,148,081	536,726	57,6
■	460	■	■	Parsons (Dec)	530,174	1,213,997	391,425	42,7
■	■	469	■	Payless Cashways (Nov)	263,220	602,666	591,874	23,0
305	207	330	228	Penn Central (Dec)	3,099,000	3,165,400	843,921	131,5
94	35	59	52	J C Penney (Jan)	7,938,535	11,413,806	3,552,612	391,6
152	458	202	90	Pennsylvania Power & Light (Dec)	5,530,939	1,219,548	1,395,681	278,8
288	288	141	148	Pennzoil (Dec)	3,226,310	2,268,511	1,803,212	188,7
467	■	■	■	Peoples Bancorporation (Dec)	2,005,262	228,898	60,086	13,4
■	388	■	498	Peoples Energy (Sept)	1,166,668	1,542,490	302,195	45,9
215	61	69	116	PepsiCo (Dec)	4,197,470	7,498,998	3,338,121	224,2

■ Not on 500 list.

A Summary of the 500s' Rankings

Cash flow ($000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
452,303	61,767	NYSE	NL	2.90	1.00	18⅜	New York, NY	20.3	**Theodore C Rogers**
182,687	44,583	NYSE	NBL	1.58	0.12	14¼	Ardmore, Okla	2.0	**Roy Butler**
779,492	62,792	NYSE	NSC	6.57	2.80	54¾	Norfolk, Va	41.3	**Robert B Claytor**
58,612	9,403	NYSE	NOR	4.75	1.95	27⅜	Albany, NY	3.2	**Peter D Kiernan**
146,208	13,851	NYSE	NPH	5.33	1.70	47¼	New York, NY	47.4	**Cees Bruynes**
361,660	89,498	NYSE	NU	1.76	1.28	12⅛	Berlin, Conn	8.4	**William B Ellis**
174,915	58,562	NYSE	NI	0.90	1.50	12⅝	Hammond, Ind	6.6	**Edmund A Schroer**
412,727	30,237	NYSE	NSP	4.79	2.65	30	Minneapolis, Minn	7.4	**Donald W McCarthy**
66,641	4,852	NASDAQ	NTRS	6.71	2.72	45	Chicago, Ill	4.1	**Philip W K Sweet Jr**
38,900	15,151	NYSE	NOC	0.36	1.80	75⅜	Los Angeles, Cal	33.5	**Thomas V Jones**
132,895	21,678	NYSE	NWA	0.23	0.80	47	St Paul, Minn	13.4	**M Joseph Lapensky**
209,089	26,964	NYSE	NOB	3.08	1.68	24⅝	Minneapolis, Minn	15.2	**John W Morrison**
165,187	17,620	NYSE	NWP	1.87	1.35	15⅞	Salt Lake City, Utah	2.8	**John G McMillian**
377,000	19,730	NYSE	NWT	8.75	3.54	35⅞	Chicago, Ill	36.5	**Ben W Heineman**
26,529	5,111	NASDAQ	NWFN	1.75	0.82	19½	Wilkesboro, NC	3.0	**Ben T Craig**
61,785	17,365	NYSE	NRT	1.13	2.00	32⅝	Worcester, Mass	22.9	**Donald R Melville**
215,530	23,535	NYSE	NSI	2.42	1.08	24	New York, NY	37.5	**David J Mahoney**
723,225	95,856	NYSE	OXY	0.69	2.50	19¾	Los Angeles, Cal	50.8	**Armand Hammer**
149,830	18,904	NYSE	OG	3.13	1.80	28	New York, NY	32.8	**Ralph E Ablon**
84,390	11,507	NASDAQ	OCAS	4.91	2.36	42⅞	Hamilton, Ohio	5.3	**John G Sloneker**
322,139	96,082	NYSE	OEC	1.89	1.76	14	Akron, Ohio	7.8	**Justin T Rogers Jr**
203,126	38,416	NYSE	OGE	2.57	1.76	19⅜	Oklahoma City, Okla	3.7	**James G Harlow Jr**
29,428	7,444	NASDAQ	OKEN	3.04	1.01	14½	Grand Rapids, Mich	2.1	**John C Canepa**
21,503	2,024	NASDAQ	OSTN	3.50	1.92	23	Providence, RI	1.1	**Theodore W Barnes**
209,600	23,638	NYSE	OLN	2.26	1.20	23½	Stamford, Conn	18.9	**John M Henske**
134,214	12,061	NYSE	OKE	4.88	2.35	26⅝	Tulsa, Okla	2.8	**J E Tyree**
107,289	25,815	NYSE	OSG	2.35	0.50	15½	New York, NY	2.2	**Morton P Hyman**
170,798	27,662	NYSE	OCF	0.98	1.20	37½	Toledo, Ohio	21.9	**William W Boeschenstein**
277,800	26,942	NYSE	OI	1.36	1.68	28¼	Toledo, Ohio	48.8	**Edwin D Dodd**
43,737	9,068	NASDAQ	PCAR	4.11	2.82	82¼	Bellevue, Wash	8.8	**Charles M Pigott**
,240,639	142,262	NYSE	PCG	4.91	2.86	28⅛	San Francisco, Cal	26.3	**Frederick W Mielke Jr**
204,308	27,205	NYSE	PLT	4.57	2.82	28⅜	Los Angeles, Cal	10.0	**Paul A Miller**
440,772	55,492	NYSE	PPW	3.03	2.16	21⅛	Portland, Ore	9.2	**Don C Frisbee**
25,692	10,858	NASDAQ	PRIN	0.79	0.56	8¾	Honolulu, Haw	0.7	**James F Gary**
51,745	14,130	NYSE	PWJ	2.53	0.36	39⅝	New York, NY	9.9	**Donald B Marron**
32,816	17,993	ASE	PLL	1.40	0.32	36⅛	Glen Cove, NY	3.3	**Abraham Krasnoff**
-218,352	81,965	NYSE	PN	–6.30	none	3⅝	New York, NY	37.0	**C Edward Acker**
513,017	41,426	NYSE	PEL	5.36	2.30	26¼	Houston, Tex	7.6	**Robert D Hunsucker**
173,182	28,883	NYSE	PKD	2.65	0.16	10⅛	Tulsa, Okla	5.8	**Robert L Parker**
91,557	25,110	NYSE	PH	2.31	0.96	21⅜	Cleveland, Ohio	20.8	**Patrick S Parker**
49,119	18,529	NYSE	RMP	2.31	0.92	21⅛	Pasadena, Cal	9.2	**William E Leonhard**
33,204	13,490	NYSE	PCI	1.92	0.20	43⅞	Kansas City, Mo	5.9	**David Stanley**
341,100	31,997	NYSE	PC	3.02	none	26⅜	New York, NY	38.7	**Alfred W Martinelli**
664,000	73,439	NYSE	JCP	5.35	1.96	48⅜	New York, NY	176.0	**Donald V Seibert**
146,297	66,461	NYSE	PPL	3.35	2.30	21	Allentown, Pa	8.1	**Robert K Campbell**
547,859	51,337	NYSE	PZL	3.60	2.20	35⅛	Houston, Tex	9.5	**J Hugh Liedtke**
26,164	3,815	NASDAQ	PEOP	3.51	1.00	15¾	Seattle, Wash	2.2	**Joshua Green III**
104,736	30,602	NYSE	PGL	1.54	1.00	9⅞	Chicago, Ill	3.8	**Eugene A Tracy**
609,680	93,374	NYSE	PEP	2.40	1.58	35¾	Purchase, NY	126.5	**Donald M Kendall**

All share data adjusted for stock splits and stock dividends through May 9, 1983.

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net pr ($0
■	■	232	416	Perkin-Elmer (July)	869,812	1,036,774	1,218,139	62,
■	320	398	277	Petrolane (Sept)	1,050,755	1,978,151	722,319	104,
248	185	30	66	Pfizer (Dec)	3,748,700	3,453,600	5,301,240	332,
464	■	456	■	Phelps Dodge (Dec)	2,013,897	957,795	612,028	–74,
■	■	472	■	PHH Group (Apr)	1,405,076	471,714	588,075	29,
15	13	64	63	[22]Phibro-Salomon (Dec)	39,669,000	26,703,000	3,409,016	337,
111	249	115	64	Philadelphia Electric (Dec)	7,157,998	2,644,753	2,138,039	336,
124	■	■	441	Philadelphia National (Dec)	6,301,254	770,161	300,664	56,
81	46	20	22	Philip Morris (Dec)	9,691,900	9,101,600	7,553,700	781,
63	23	34	27	Phillips Petroleum (Dec)	12,097,000	15,698,000	4,995,507	646,
■	■	463	■	Pic'n'Save (Dec)	124,114	177,738	605,701	27,
393	187	263	216	Pillsbury (May)	2,428,300	3,385,100	1,085,400	136,
■	491	373	420	Pioneer (Dec)	1,066,707	1,118,736	761,022	61,
■	■	380	381	Pioneer Hi-Bred International (Aug)	512,796	557,398	750,191	71,
■	407	382	332	Pitney Bowes (Dec)	1,338,044	1,455,280	746,320	83,
■	267	■	■	Pittston (Dec)	1,402,438	2,420,740	521,043	–11,
66	434	■	276	[23]PNC Financial (Dec)	11,611,171	1,307,009	NA	104,
■	484	■	■	Pneumo (Nov)	397,548	1,144,821	206,196	23,
■	■	■	471	Pogo Producing (Dec)	957,733	277,983	511,063	51,
■	439	362	■	Polaroid (Dec)	1,323,600	1,293,900	781,715	23,
415	■	452	196	Portland General Electric (Dec)	2,322,972	572,193	621,255	150,
■	■	495	■	Potlatch (Dec)	1,175,779	820,180	562,937	22
349	■	335	249	Potomac Electric Power (Dec)	2,709,197	1,095,153	837,766	118,
282	193	143	186	PPG Industries (Dec)	3,270,100	3,321,800	1,799,451	155
■	■	484	■	Premier Industrial (May)	207,016	332,215	571,670	34
■	362	■	■	Primark (Dec)	1,351,448	1,638,666	144,281	18
■	■	262	■	Prime Computer (Dec)	376,167	435,826	1,086,256	44
102	32	13	23	Procter & Gamble (June)	7,510,000	11,994,000	9,819,953	777
354	■	■	397	Provident Life & Accident (Dec)	2,695,161	1,066,748	471,872	67
372	375	344	251	Public Service Company of Colorado (Dec)	2,574,773	1,590,039	816,973	116
245	■	234	108	Public Service Company of Indiana (Dec)	3,813,198	809,394	1,205,741	233
■	■	■	301	Public Service Co of New Hampshire (Dec)	1,615,523	423,290	464,170	91
438	■	338	252	Public Service Company of New Mexico (Dec)	2,146,496	426,543	833,066	115
95	156	111	60	Public Service Electric & Gas (Dec)	7,906,967	3,873,976	2,205,146	342
474	■	476	285	Puget Sound Power & Light (Dec)	1,953,833	467,697	582,390	99
■	245	325	286	Quaker Oats (June)	1,476,700	2,711,900	848,368	96
141	■	■	■	Rainier Bancorporation (Dec)	5,864,656	731,814	265,873	39
445	115	145	394	Ralston Purina (Sept)	2,113,800	4,802,600	1,772,435	69
■	■	451	■	Raychem (June)	451,809	534,949	626,580	37
■	363	■	■	Raymond International (Dec)	496,764	1,638,336	81,198	12
262	96	50	71	Raytheon (Dec)	3,510,191	5,513,370	3,777,482	318
57	45	139	120	[1]RCA (Dec)	12,931,900	9,338,200	1,834,268	222
■	■	■	377	Reading & Bates (Dec)	1,141,746	516,824	375,179	73
■	391	■	■	Republic Airlines (Dec)	1,186,174	1,530,668	173,770	–39
84	451	■	387	Republic New York (Dec)	9,280,172	1,249,347	413,896	70
313	242	■	■	Republic Steel (Dec)	3,033,426	2,738,160	252,859	–24
48	325	345	202	[24]RepublicBank (Dec)	17,218,299	1,933,567	815,601	14
■	387	340	477	Revco D S (May)	500,884	1,554,656	830,453	4
422	281	272	259	Revlon (Dec)	2,272,506	2,350,988	1,069,852	11

■ Not on 500 list.

[1]Figures include unconsolidated subsidiaries.

[22]Formerly Phibro.

[23]Pro forma results reflect the combination of Pittsburgh Na al and Provident National in January 1983. As a result, m value of common stock as of Dec. 31 is not available

[24]Formerly Republic of Texas

A Summary of the 500s' Rankings

Cash flow ($000)	Share data: 1982 — Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
90,788	42,930	NYSE	PKN	1.45	0.50	28⅜	Norwalk, Conn	14.8	Robert H Sorensen
190,144	52,059	NYSE	PTO	2.00	0.48	13⅞	Long Beach, Cal	17.7	John C Wallace
462,100	76,969	NYSE	PFE	4.26	1.84	68⅞	New York, NY	40.8	Edmund T Pratt Jr
–36,257	21,761	NYSE	PD	–3.59	0.30	28⅛	New York, NY	12.2	George B Munroe
46,098	15,682	NYSE	PHH	1.93	0.69	37½	Hunt Valley, MD	2.3	Jerome W Geckle
439,000	68,869	NYSE	PSB	4.97	0.94	49½	New York, NY	6.9	David Tendler
521,623	125,767	NYSE	PE	2.39	2.06	17	Philadelphia, Pa	10.1	James L Everett
83,533	5,824	NASDAQ	PHNA	9.73	3.16	51⅝	Philadelphia, Pa	4.9	G Morris Dorrance Jr
1,180,500	125,895	NYSE	MO	6.23	2.30	60	New York, NY	72.0	George Weissman
1,919,000	153,119	NYSE	P	4.23	2.20	32⅝	Bartlesville, Okla	32.1	William C Douce
28,430	15,631	NASDAQ	PICN	1.75	none	38¾	Carson, Cal	1.9	Arthur Frankel
247,600	21,708	NYSE	PSY	6.29	2.30	50	Minneapolis, Minn	57.6	William H Spoor
194,078	37,123	NYSE	PNA	1.66	1.04	20½	Amarillo, Tex	3.1	K Bert Watson
89,568	31,923	NASDAQ	PHYB	2.24	0.68	23½	Des Moines, Iowa	2.4	Thomas N Urban
179,330	16,313	NYSE	PBI	4.32	1.60	45¾	Stamford, Conn	26.6	George B Harvey
68,006	37,894	NYSE	PCO	–0.31	1.05	13¾	Greenwich, Conn	14.5	Nicholas T Camicia
143,788	20,560	NASDAQ	PNCF	5.09	1.92	NA	Pittsburgh, Pa	6.1	Merle E Gilliand
56,269	6,369	NYSE	PNC	3.37	0.70	32⅜	Boston, Mass	9.2	Gerard A Fulham
178,188	24,050	NYSE	PPP	2.05	0.60	21¼	Houston, Tex	0.2	William C Liedtke Jr
104,400	30,959	NYSE	PRD	0.73	1.00	25¼	Cambridge, Mass	15.7	William J McCune Jr
232,504	40,738	NYSE	PGN	3.02	1.74	15¼	Portland, Ore	3.2	Robert H Short
84,435	15,318	NYSE	PCH	0.87	1.48	36¾	San Francisco, Cal	9.0	Richard B Madden
227,276	45,905	NYSE	POM	2.28	1.68	18¼	Washington, DC	5.4	W Reid Thompson
383,300	34,772	NYSE	PPG	4.51	2.36	51¼	Pittsburgh, Pa	37.0	L Stanton Williams
40,145	20,788	NYSE	PRE	1.66	0.40	27½	Cleveland, Ohio	3.1	Morton L Mandel
77,834	5,889	NYSE	PMK	3.10	2.40	24½	Detroit, Mich	4.4	Robert W Stewart
80,566	31,372	NYSE	PRM	1.48	none	34⅝	Natick, Ma	5.0	Joe M Henson
1,127,000	166,088	NYSE	PG	4.70	2.10	59⅛	Cincinnati, Ohio	62.4	John G Smale
263,056	9,344	NASDAQ	PACC	7.16	2.38	50½	Chattanooga, Tenn	4.0	H Carey Hanlin
242,841	47,020	NYSE	PSR	2.17	1.74	17⅜	Denver, Colo	6.6	Richard F Walker
290,521	48,472	NYSE	PIN	4.55	2.72	24⅞	Plainfield, Ind	5.2	Hugh A Barker
43,365	26,524	NYSE	PNH	2.73	2.12	17½	Manchester, NH	2.2	Robert J Harrison
125,455	32,041	NYSE	PNM	3.22	2.77	26	Albuquerque, NM	3.1	Jerry D Geist
839,176	94,845	NYSE	PEG	3.24	2.53	23¼	Newark, NJ	13.0	Robert I Smith
113,891	37,879	NYSE	PSD	2.29	1.76	15⅜	Bellevue, Wash	2.4	John W Ellis
169,000	19,787	NYSE	OAT	4.76	1.85	42⅞	Chicago, Ill	28.5	William D Smithburg
84,565	9,581	NASDAQ	RBAN	4.12	1.50	27¾	Seattle, Wash	5.3	G Robert Truex Jr
274,300	101,282	NYSE	RAL	0.66	0.78	17½	St. Louis, Mo	61.1	William P Stiritz
61,460	9,440	NYSE	RYC	4.07	0.44	66⅜	Menlo Park, Cal	8.1	Paul M Cook
28,532	6,246	NYSE	RII	1.94	1.00	13	Houston, Tex	14.0	Henry F LeMieux
512,226	84,413	NYSE	RTN	3.78	1.40	44¾	Lexington, Mass	74.3	Thomas L Phillips
880,800	81,523	NYSE	RCA	2.03	1.13	22½	New York, NY	114.3	Thornton F Bradshaw
186,461	27,791	NYSE	RB	2.36	0.80	13½	Tulsa, Okla	2.5	John W Bates Jr
30,501	22,066	NYSE	RAI	–1.99	none	7⅞	Minneapolis, Minn	14.5	Daniel F May
106,887	10,892	NYSE	RNB	5.26	1.35	38	New York, NY	2.4	Walter H Weiner
–268,460	16,183	NYSE	RS	–15.07	1.13	15⅝	Cleveland, Ohio	30.3	E Bradley Jones
224,724	26,962	NYSE	RPT	5.18	1.48	30¼	Dallas, Tex	7.6	James D Berry
70,706	30,758	NYSE	RDS	1.61	0.55	27	Twinsburg, Ohio	20.9	Sidney Dworkin
195,657	35,367	NYSE	REV	2.45	1.84	30¼	New York, NY	33.6	Michel C Bergerac

All share data adjusted for stock splits and stock dividends through May 9, 1983.
NA: Not available

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net prof ($000
■	■	232	416	Perkin-Elmer (July)	869,812	1,036,774	1,218,139	62,66
■	320	398	277	Petrolane (Sept)	1,050,755	1,978,151	722,319	104,34
248	185	30	66	Pfizer (Dec)	3,748,700	3,453,600	5,301,240	332,80
464	■	456	■	Phelps Dodge (Dec)	2,013,897	957,795	612,028	–74,29
■	■	472	■	PHH Group (Apr)	1,405,076	471,714	588,075	29,56
15	13	64	63	[22]Phibro-Salomon (Dec)	39,669,000	26,703,000	3,409,016	337,00
111	249	115	64	Philadelphia Electric (Dec)	7,157,998	2,644,753	2,138,039	336,22
124	■	■	441	Philadelphia National (Dec)	6,301,254	770,161	300,664	56,65
81	46	20	22	Philip Morris (Dec)	9,691,900	9,101,600	7,553,700	781,80
63	23	34	27	Phillips Petroleum (Dec)	12,097,000	15,698,000	4,995,507	646,00
■	■	463	■	Pic'n'Save (Dec)	124,114	177,738	605,701	27,00
393	187	263	216	Pillsbury (May)	2,428,300	3,385,100	1,085,400	136,30
■	491	373	420	Pioneer (Dec)	1,066,707	1,118,736	761,022	61,54
■	■	380	381	Pioneer Hi-Bred International (Aug)	512,796	557,398	750,191	71,60
■	407	382	332	Pitney Bowes (Dec)	1,338,044	1,455,280	746,320	83,12
■	267	■	■	Pittston (Dec)	1,402,438	2,420,740	521,043	–11,69
66	434	■	276	[23]PNC Financial (Dec)	11,611,171	1,307,009	NA	104,51
■	484	■	■	Pneumo (Nov)	397,548	1,144,821	206,196	23,60
■	■	■	471	Pogo Producing (Dec)	957,733	277,983	511,063	51,28
■	439	362	■	Polaroid (Dec)	1,323,600	1,293,900	781,715	23,50
415	■	452	196	Portland General Electric (Dec)	2,322,972	572,193	621,255	150,16
■	■	495	■	Potlatch (Dec)	1,175,779	820,180	562,937	22,53
349	■	335	249	Potomac Electric Power (Dec)	2,709,197	1,095,153	837,766	118,98
282	193	143	186	PPG Industries (Dec)	3,270,100	3,321,800	1,799,451	155,10
■	■	484	■	Premier Industrial (May)	207,016	332,215	571,670	34,58
■	362	■	■	Primark (Dec)	1,351,448	1,638,666	144,281	18,25
■	■	262	■	Prime Computer (Dec)	376,167	435,826	1,086,256	44,92
102	32	13	23	Procter & Gamble (June)	7,510,000	11,994,000	9,819,953	777,00
354	■	■	397	Provident Life & Accident (Dec)	2,695,161	1,066,748	471,872	67,20
372	375	344	251	Public Service Company of Colorado (Dec)	2,574,773	1,590,039	816,973	116,49
245	■	234	108	Public Service Company of Indiana (Dec)	3,813,198	809,394	1,205,741	233,23
■	■	■	301	Public Service Co of New Hampshire (Dec)	1,615,523	423,290	464,170	91,62
438	■	338	252	Public Service Company of New Mexico (Dec)	2,146,496	426,543	833,066	115,82
95	156	111	60	Public Service Electric & Gas (Dec)	7,906,967	3,873,976	2,205,146	342,82
474	■	476	285	Puget Sound Power & Light (Dec)	1,953,833	467,697	582,390	99,22
■	245	325	286	Quaker Oats (June)	1,476,700	2,711,900	848,368	96,90
141	■	■	■	Rainier Bancorporation (Dec)	5,864,656	731,814	265,873	39,18
445	115	145	394	Ralston Purina (Sept)	2,113,800	4,802,600	1,772,435	69,10
■	■	451	■	Raychem (June)	451,809	534,949	626,580	37,24
■	363	■	■	Raymond International (Dec)	496,764	1,638,336	81,198	12,20
262	96	50	71	Raytheon (Dec)	3,510,191	5,513,370	3,777,482	318,76
57	45	139	120	[1]RCA (Dec)	12,931,900	9,338,200	1,834,268	222,60
■	■	■	377	Reading & Bates (Dec)	1,141,746	516,824	375,179	73,28
■	391	■	■	Republic Airlines (Dec)	1,186,174	1,530,668	173,770	–39,86
84	451	■	387	Republic New York (Dec)	9,280,172	1,249,347	413,896	70,53
313	242	■	■	Republic Steel (Dec)	3,033,426	2,738,160	252,859	–243,85
48	325	345	202	[24]RepublicBank (Dec)	17,218,299	1,933,567	815,601	143,83
■	387	340	477	Revco D S (May)	500,884	1,554,656	830,453	49,63
422	281	272	259	Revlon (Dec)	2,272,506	2,350,988	1,069,852	111,14

■ Not on 500 list.

[1]Figures include unconsolidated subsidiaries.

[22]Formerly Phibro.

[23]Pro forma results reflect the combination of Pittsburgh Natio al and Provident National in January 1983. As a result, mark value of common stock as of Dec. 31 is not available

[24]Formerly Republic of Texas.

A Summary of the 500s' Rankings

Cash flow ($000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
90,788	42,930	NYSE	PKN	1.45	0.50	28⅜	Norwalk, Conn	14.8	**Robert H Sorensen**
190,144	52,059	NYSE	PTO	2.00	0.48	13⅞	Long Beach, Cal	17.7	**John C Wallace**
462,100	76,969	NYSE	PFE	4.26	1.84	68⅞	New York, NY	40.8	**Edmund T Pratt Jr**
–36,257	21,761	NYSE	PD	–3.59	0.30	28⅛	New York, NY	12.2	**George B Munroe**
46,098	15,682	NYSE	PHH	1.93	0.69	37½	Hunt Valley, MD	2.3	**Jerome W Geckle**
439,000	68,869	NYSE	PSB	4.97	0.94	49½	New York, NY	6.9	**David Tendler**
521,623	125,767	NYSE	PE	2.39	2.06	17	Philadelphia, Pa	10.1	**James L Everett**
83,533	5,824	NASDAQ	PHNA	9.73	3.16	51⅝	Philadelphia, Pa	4.9	**G Morris Dorrance Jr**
1,180,500	125,895	NYSE	MO	6.23	2.30	60	New York, NY	72.0	**George Weissman**
1,919,000	153,119	NYSE	P	4.23	2.20	32⅝	Bartlesville, Okla	32.1	**William C Douce**
28,430	15,631	NASDAQ	PICN	1.75	none	38¾	Carson, Cal	1.9	**Arthur Frankel**
247,600	21,708	NYSE	PSY	6.29	2.30	50	Minneapolis, Minn	57.6	**William H Spoor**
194,078	37,123	NYSE	PNA	1.66	1.04	20½	Amarillo, Tex	3.1	**K Bert Watson**
89,568	31,923	NASDAQ	PHYB	2.24	0.68	23½	Des Moines, Iowa	2.4	**Thomas N Urban**
179,330	16,313	NYSE	PBI	4.32	1.60	45¾	Stamford, Conn	26.6	**George B Harvey**
68,006	37,894	NYSE	PCO	–0.31	1.05	13¾	Greenwich, Conn	14.5	**Nicholas T Camicia**
143,788	20,560	NASDAQ	PNCF	5.09	1.92	NA	Pittsburgh, Pa	6.1	**Merle E Gilliand**
56,269	6,369	NYSE	PNC	3.37	0.70	32⅜	Boston, Mass	9.2	**Gerard A Fulham**
178,188	24,050	NYSE	PPP	2.05	0.60	21¼	Houston, Tex	0.2	**William C Liedtke Jr**
104,400	30,959	NYSE	PRD	0.73	1.00	25¼	Cambridge, Mass	15.7	**William J McCune Jr**
232,504	40,738	NYSE	PGN	3.02	1.74	15¼	Portland, Ore	3.2	**Robert H Short**
84,435	15,318	NYSE	PCH	0.87	1.48	36¾	San Francisco, Cal	9.0	**Richard B Madden**
227,276	45,905	NYSE	POM	2.28	1.68	18¼	Washington, DC	5.4	**W Reid Thompson**
383,300	34,772	NYSE	PPG	4.51	2.36	51¾	Pittsburgh, Pa	37.0	**L Stanton Williams**
40,145	20,788	NYSE	PRE	1.66	0.40	27½	Cleveland, Ohio	3.1	**Morton L Mandel**
77,834	5,889	NYSE	PMK	3.10	2.40	24½	Detroit, Mich	4.4	**Robert W Stewart**
80,566	31,372	NYSE	PRM	1.48	none	34⅝	Natick, Ma	5.0	**Joe M Henson**
1,127,000	166,088	NYSE	PG	4.70	2.10	59⅛	Cincinnati, Ohio	62.4	**John G Smale**
263,056	9,344	NASDAQ	PACC	7.16	2.38	50½	Chattanooga, Tenn	4.0	**H Carey Hanlin**
242,841	47,020	NYSE	PSR	2.17	1.74	17⅜	Denver, Colo	6.6	**Richard F Walker**
290,521	48,472	NYSE	PIN	4.55	2.72	24⅞	Plainfield, Ind	5.2	**Hugh A Barker**
43,365	26,524	NYSE	PNH	2.73	2.12	17½	Manchester, NH	2.2	**Robert J Harrison**
125,455	32,041	NYSE	PNM	3.22	2.77	26	Albuquerque, NM	3.1	**Jerry D Geist**
839,176	94,845	NYSE	PEG	3.24	2.53	23¼	Newark, NJ	13.0	**Robert I Smith**
113,891	37,879	NYSE	PSD	2.29	1.76	15⅜	Bellevue, Wash	2.4	**John W Ellis**
169,000	19,787	NYSE	OAT	4.76	1.85	42⅞	Chicago, Ill	28.5	**William D Smithburg**
84,565	9,581	NASDAQ	RBAN	4.12	1.50	27¾	Seattle, Wash	5.3	**G Robert Truex Jr**
274,300	101,282	NYSE	RAL	0.66	0.78	17½	St. Louis, Mo	61.1	**William P Stiritz**
61,460	9,440	NYSE	RYC	4.07	0.44	66⅜	Menlo Park, Cal	8.1	**Paul M Cook**
28,532	6,246	NYSE	RII	1.94	1.00	13	Houston, Tex	14.0	**Henry F LeMieux**
512,226	84,413	NYSE	RTN	3.78	1.40	44¾	Lexington, Mass	74.3	**Thomas L Phillips**
880,800	81,523	NYSE	RCA	2.03	1.13	22½	New York, NY	114.3	**Thornton F Bradshaw**
186,461	27,791	NYSE	RB	2.36	0.80	13½	Tulsa, Okla	2.5	**John W Bates Jr**
30,501	22,066	NYSE	RAI	–1.99	none	7⅞	Minneapolis, Minn	14.5	**Daniel F May**
106,887	10,892	NYSE	RNB	5.26	1.35	38	New York, NY	2.4	**Walter H Weiner**
–268,460	16,183	NYSE	RS	–15.07	1.13	15⅝	Cleveland, Ohio	30.3	**E Bradley Jones**
224,724	26,962	NYSE	RPT	5.18	1.48	30¼	Dallas, Tex	7.6	**James D Berry**
70,706	30,758	NYSE	RDS	1.61	0.55	27	Twinsburg, Ohio	20.9	**Sidney Dworkin**
195,657	35,367	NYSE	REV	2.45	1.84	30¼	New York, NY	33.6	**Michel C Bergerac**

All share data adjusted for stock splits and stock dividends through May 9, 1983.

NA: Not available.

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net prof ($000
489	70	302	263	Southland (Dec)	1,842,584	6,756,933	932,778	108,05
■	■	420	■	Southland Royalty (Dec)	683,083	357,925	663,609	28,65
391	■	■	■	SouthTrust (Dec)	2,441,447	285,283	107,565	22,86
■	■	466	■	Southwest Airlines (Dec)	420,542	331,189	595,122	34,00
115	■	■	399	Southwest Bancshares (Dec)	6,926,581	772,591	376,761	66,57
■	■	470	360	Southwestern Public Service (Aug)	1,238,753	588,949	590,406	76,30
158	92	183	121	Sperry (Mar)	5,343,000	5,571,400	1,526,474	221,80
■	■	298	380	Square D (Dec)	804,762	1,056,981	946,670	71,70
481	360	108	188	Squibb (Dec)	1,929,712	1,660,766	2,277,105	153,63
■	376	■	417	A E Staley Manufacturing (Sept)	1,143,610	1,588,114	421,629	62,61
30	8	9	10	Standard Oil Calif (Dec)	23,464,628	34,362,000	10,919,328	1,377,00
29	12	7	5	Standard Oil Indiana (Dec)	24,289,000	28,073,000	11,614,314	1,826,00
52	29	17	4	Standard Oil Ohio (Dec)	16,016,000	13,152,000	8,808,673	1,879,00
■	■	424	■	Stanley Works (Dec)	636,497	962,778	658,952	37,50
230	■	■	480	State Street Boston (Dec)	3,914,980	469,489	237,630	48,92
433	367	283	242	Stauffer Chemical (Dec)	2,189,085	1,618,235	1,024,581	123,54
■	343	206	226	Sterling Drug (Dec)	1,332,957	1,796,153	1,367,640	131,97
■	341	■	■	J P Stevens (Oct)	1,068,572	1,814,315	311,299	22,28
■	■	■	456	Stone & Webster (Dec)	431,438	322,272	330,941	53,78
■	282	■	■	Stop & Shop Cos (Jan)	617,665	2,341,875	279,095	34,82
■	■	395	412	Storage Technology (Dec)	1,206,455	1,079,235	725,156	63,32
437	■	■	■	Suburban Bancorp (Dec)	2,151,808	213,576	104,388	18,80
444	■	■	■	Sumitomo Bank of California (Dec)	2,114,610	268,706	50,115	7,60
180	■	■	■	Sun Banks of Florida (Dec)	5,004,141	528,639	337,583	34,23
64	24	55	33	Sun Company (Dec)	12,019,000	15,519,000	3,705,607	537,00
■	■	349	393	Sundstrand (Dec)	895,314	961,573	805,200	69,30
■	486	■	■	Super Food Services (Aug)	132,901	1,128,511	28,116	3,61
■	102	296	396	Super Valu Stores (Feb)	857,195	5,197,081	952,718	68,03
181	310	56	118	Superior Oil (Dec)	4,993,235	2,040,518	3,662,060	223,42
■	198	■	■	Supermarkets General (Jan)	691,761	3,247,338	329,963	37,69
■	260	■	■	Swift Independent (Oct)	258,662	2,488,159	131,145	25,33
■	352	342	■	Sysco (June)	435,556	1,713,393	820,011	34,20
■	■	490	■	Tampax (Dec)	206,333	287,532	565,061	43,32
■	■	293	■	Tandem Computers (Sept)	337,366	312,143	964,707	29,85
■	■	354	■	Tandon (Sept)	156,147	150,490	794,619	15,73
■	313	31	117	Tandy (June)	1,227,644	2,032,555	5,297,031	224,08
■	■	■	487	TECO Energy (Dec)	1,432,185	599,905	444,133	47,97
■	467	257	346	Tektronix (May)	1,042,287	1,195,748	1,095,056	79,43
■	■	478	■	Tele-Communications (Dec)	916,673	282,552	580,364	10,40
151	149	91	85	[1]Teledyne (Dec)	5,561,800	4,039,800	2,672,629	289,53
46	25	41	19	Tenneco (Dec)	17,377,890	14,978,614	4,413,036	819,00
■	265	■	474	Tesoro Petroleum (Sept)	840,269	2,439,853	231,323	50,1
25	5	19	11	Texaco (Dec)	27,114,000	46,986,000	8,033,829	1,281,0
■	395	■	■	Texas Air (Dec)	1,191,976	1,516,320	138,976	–48,9
195	■	■	■	Texas American Bancshares (Dec)	4,717,155	549,476	249,306	42,5
44	342	238	164	Texas Commerce Bancshares (Dec)	18,217,000	1,798,000	1,188,936	170,0
203	89	187	171	Texas Eastern (Dec)	4,541,537	5,654,353	1,499,648	161,3
491	234	■	255	[2]Texas Gas (Dec)	1,827,618	2,877,590	539,423	113,4
365	131	76	201	Texas Instruments (Dec)	2,631,400	4,326,600	3,184,151	144,0

■ Not on 500 list

[1]Figures include unconsolidated subsidiaries

[2] Formerly Texas Gas Transmission

A Summary of the 500s' Rankings

Cash flow ($000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
235,490	36,108	NYSE	SLC	3.02	0.77	25⅞	Dallas, Tex	49.8	**John P Thompson**
119,203	43,875	NYSE	SRO	0.64	0.08	15⅛	Fort Worth, Tex	0.5	**Jon Brumley**
33,104	7,171	NASDAQ	SOTR	3.14	1.06	15	Birmingham, Ala	2.4	**Wallace D Malone Jr**
72,084	22,352	NYSE	LUV	1.60	0.16	26⅝	Dallas, Tex	2.5	**Herbert D Kelleher**
81,747	15,378	NYSE	SWB	4.31	1.20	24½	Houston, Tex	4.3	**John T Cater**
109,210	34,987	NYSE	SPS	2.02	1.53	16⅞	Amarillo, Tex	2.3	**Berl M Springer**
322,700	45,397	NYSE	SY	5.25	1.92	33⅝	New York, NY	90.6	**Gerald G Probst**
111,474	27,640	NYSE	SQD	2.61	1.84	34¼	Palatine, Ill	21.7	**Mitchell P Kartalia**
182,504	51,460	NYSE	SQB	3.01	1.28	44¼	Princeton, NJ	23.5	**Richard M Furlaud**
135,597	22,191	NYSE	STA	2.75	0.80	19	Decatur, Ill	4.4	**Donald E Nordlund**
2,730,000	341,229	NYSE	SD	4.03	2.40	32	San Francisco, Cal	42.5	**George M Keller**
3,915,000	292,184	NYSE	SN	6.25	2.80	39¾	Chicago, Ill	58.2	**John E Swearingen**
2,973,000	247,261	NYSE	SOH	7.63	2.55	35⅝	Cleveland, Ohio	53.3	**Alton W Whitehouse Jr**
66,728	26,896	NYSE	SWK	1.40	0.76	24½	New Britain, Conn	15.5	**Donald W Davis**
68,394	8,602	NASDAQ	STBK	5.88	0.78	27⅝	Boston, Mass	3.7	**William S Edgerly**
327,472	44,068	NYSE	STF	2.81	1.41	23¼	Westport, Conn	11.6	**H Barclay Morley**
175,932	60,784	NYSE	STY	2.17	1.06	22½	New York, NY	24.8	**Dr W Clarke Wescoe**
80,927	14,479	NYSE	STN	1.54	1.20	21½	New York, NY	35.9	**Whitney Stevens**
64,489	7,117	NYSE	SW	7.55	1.85	46½	New York, NY	15.0	**Raymond C Foster**
66,491	5,121	NYSE	SHP	6.87	1.12	54½	Boston, Mass	29.0	**Avram J Goldberg**
190,466	34,125	NYSE	STK	1.84	none	21¼	Louisville, Colo	15.5	**Jesse I Aweida**
35,540	4,772	NASDAQ	SUBC	3.95	1.68	21⅞	Bethesda, Md	1.8	**Robert F Tardio**
15,519	4,091	NASDAQ	SUMI	1.68	1.16	12¼	San Francisco, Cal	1.7	**Teruhisa Shimizu**
62,070	15,258	NYSE	SU	2.66	1.02	22⅛	Orlando, Fla	5.3	**Joel R Wells Jr**
1,954,000	118,107	NYSE	SUN	4.49	2.25	31⅜	Radnor, Pa	43.3	**Theodore A Burtis**
123,476	18,300	NYSE	SNS	3.77	1.80	44	Rockford, Ill	14.6	**Evans W Erikson**
7,225	1,562	ASE	SFS	1.70	0.46	18	Dayton, Ohio	1.9	**Jack Twyman**
112,140E	36,820	NYSE	SVU	1.85	0.52	25⅞	Eden Prairie, Minn	20.0	**Michael W Wright**
941,782	127,376	NYSE	SOC	1.75	0.20	28¾	Houston, Tex	6.8	**Frederic C Ackman**
95,092	8,799	NYSE	SGL	4.38	0.64	37½	Woodbridge, NJ	30.5	**Leonard Lieberman**
31,751	4,996	ASE	SFT	5.07	1.04	26¼	Chicago, Ill	6.0	**John A Copeland**
50,636	20,892	NYSE	SYY	1.71	0.26	39¼	Houston, Tex	6.6	**John F Woodhouse**
48,208	11,245	NASDAQ	TPAX	3.84	2.65	50¼	Lake Success, NY	2.7	**Edwin H Shutt**
49,972	38,018	NASDAQ	TNDM	0.76	none	25⅜	Cupertino, Cal	3.6	**James G Treybig**
18,745	50,452	NASDAQ	TCOR	0.37	none	15¾	Chatsworth, Cal	1.8	**Sirjang Lal Tandon**
260,840	104,375	NYSE	TAN	2.17	none	50¾	Fort Worth, Tex	28.5	**John V Roach**
150,571	21,404	NYSE	TE	2.49	1.84	20¾	Tampa, Fla	2.9	**Hugh L Culbreath**
144,690	18,962	NYSE	TEK	4.25	1.00	57¾	Beaverton, Ore	23.6	**Earl Wantland**
70,054	20,914	NASDAQ	TCOMA	0.47	none	27¾	Englewood, Colo	3.2	**John C Malone**
356,500	20,658	NYSE	TDY	14.01	none	129⅜	Los Angeles, Cal	45.5	**Henry E Singleton**
2,240,607	136,310	NYSE	TGT	5.74	2.63	32⅜	Houston, Tex	99.8	**James L Ketelsen**
119,724	13,708	NYSE	TSO	2.90	0.40	16⅞	San Antonio, Tex	3.6	**Robert V West Jr**
2,691,000	258,115	NYSE	TX	4.92	3.00	31⅛	White Plains, NY	63.5	**John K McKinley**
–32,801	12,682	ASE	TEX	–7.27	0.16	10¾	Houston, Tex	13.8	**Francisco A Lorenzo**
67,782	8,825	NYSE	TXA	4.82	1.32	28¼	Fort Worth, Tex	3.1	**Lewis H Bond**
254,000	31,811	NYSE	TCB	5.35	1.10	37⅜	Houston, Tex	7.7	**Ben F Love**
509,393	25,856	NYSE	TET	6.28	3.95	58	Houston, Tex	6.2	**I David Bufkin**
252,763	20,260	NYSE	TXG	5.49	2.02	26⅝	Owensboro, Ky	9.8	**Dennis R Hendrix**
482,500	23,652	NYSE	TXN	6.10	2.00	134⅝	Dallas, Tex	81.9	**Mark Shepherd Jr**

All share data adjusted for stock splits and stock dividends through May 9, 1983.

E: Estimate

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net profi ($000)
384	328	75	104	Texas Oil & Gas (Aug)	2,462,897	1,878,557	3,241,118	247,093
92	200	89	43	Texas Utilities (Dec)	8,021,407	3,238,025	2,683,277	428,646
457	227	347	328	Textron (Dec)	2,038,200	2,936,000	812,013	84,400
301	■	■	■	Third National (Dec)	3,134,560	374,981	121,822	27,023
■	488	■	■	Thrifty Corp (Aug)	390,973	1,126,203	185,431	18,302
■	■	■	383	Tidewater (Mar)	654,119	466,341	425,570	71,468
388	409	■	■	Tiger International (Dec)	2,454,377	1,446,008	143,956	–136,223
324	176	83	190	Time Inc (Dec)	2,896,337	3,564,328	2,958,928	153,11[illegible]
440	298	116	209	Times Mirror (Dec)	2,135,594	2,200,399	2,131,416	139,874
■	■	482	■	Timken (Dec)	1,014,760	1,014,361	573,272	–3,00[illegible]
442	■	■	273	Toledo Edison (Dec)	2,121,868	481,725	550,683	105,534
312	■	■	367	[27]Torchmark (Dec)	3,036,888	947,822	490,941	75,37[illegible]
■	183	■	244	Tosco (Dec)	1,298,067	3,465,964	206,046	120,91[illegible]
■	■	197	410	Toys "R" Us (Jan)	559,008	1,041,735	1,428,980	64,16[illegible]
259	105	442	■	Trans World (Dec)	3,535,520	5,107,863	638,087	29,92[illegible]
72	132	190	154	Transamerica (Dec)	10,423,338	4,326,295	1,472,017	180,78[illegible]
238	157	462	213	[28]Transco Energy (Dec)	3,866,224	3,869,329	607,261	136,95[illegible]
434	■	■	■	TRANSOHIO Financial (Dec)	2,175,609	217,282	21,279	–24,25[illegible]
24	36	127	75	Travelers (Dec)	27,988,700	11,380,700	2,026,066	309,90[illegible]
206	■	■	463	Trust Company of Georgia (Dec)	4,510,559	481,512	377,127	52,48[illegible]
303	103	102	142	TRW (Dec)	3,124,847	5,131,872	2,389,191	196,26[illegible]
■	■	497	358	Tucson Electric Power (Dec)	1,602,215	343,774	560,365	76,43[illegible]
■	293	■	■	Turner Construction (Dec)	476,743	2,235,902	57,257	10,73[illegible]
201	99	290	■	UAL (Dec)	4,578,894	5,319,709	984,533	10,95[illegible]
456	392	191	241	Union Camp (Dec)	2,045,012	1,526,014	1,466,726	124,02[illegible]
70	47	54	76	Union Carbide (Dec)	10,615,600	9,061,500	3,709,340	309,70[illegible]
197	459	242	132	Union Electric (Dec)	4,630,797	1,217,705	1,160,693	205,46[illegible]
87	40	37	21	Union Oil Company of California (Dec)	8,511,300	10,390,400	4,623,245	804,00[illegible]
79	84	29	69	Union Pacific (Dec)	9,999,010	5,818,325	5,372,993	326,75[illegible]
■	321	■	■	Uniroyal (Dec)	1,380,920	1,969,448	315,100	25,59[illegible]
260	■	■	■	United Banks of Colorado (Dec)	3,522,248	414,670	142,290	21,40[illegible]
■	152	■	■	United Brands (June)	1,265,262	3,972,506	103,845	2,75[illegible]
321	94	377	158	United Energy Resources (Dec)	2,926,060	5,561,826	754,618	178,64[illegible]
■	■	■	403	United Illuminating (Dec)	982,852	436,730	272,697	65,75[illegible]
287	■	■	■	United Jersey Banks (Dec)	3,232,127	331,069	105,675	18,13[illegible]
348	■	■	■	United Missouri Bancshares (Dec)	2,718,799	225,264	139,886	29,18[illegible]
144	■	■	467	U S Bancorp (Dec)	5,756,309	690,125	320,706	52,06[illegible]
■	432	334	■	United States Gypsum (Dec)	1,135,443	1,324,838	839,108	43,89[illegible]
■	448	474	425	United States Shoe (Jan)	590,407	1,254,138	585,626	60,11[illegible]
42	18	113	■	United States Steel (Dec)	19,432,000	18,375,000	2,144,058	–361,00[illegible]
■	■	432	447	U S Tobacco (Dec)	332,758	320,448	648,306	55,33[illegible]
423	■	■	■	U S Trust (Dec)	2,255,520	250,948	141,750	15,36[illegible]
93	28	80	44	United Technologies (Dec)	7,993,376	13,577,129	3,074,738	426,87[illegible]
190	268	153	136	United Telecommunications (Dec)	4,753,696	2,419,169	1,699,037	201,56[illegible]
187	■	■	■	United Virginia Bankshares (Dec)	4,847,711	524,408	288,825	41,21[illegible]
■	449	■	■	Universal Leaf Tobacco (June)	419,319	1,252,646	231,691	34,27[illegible]
463	335	200	236	Upjohn (Dec)	2,013,985	1,835,625	1,401,777	126,02[illegible]
■	443	423	428	USAir Group (Dec)	1,062,250	1,273,012	659,447	59,10[illegible]
174	284	215	254	USF&G (Dec)	5,079,268	2,305,973	1,307,299	114,1[illegible]

■ Not on 500 list.

[27]Formerly Liberty National Insurance Holding.

[28]Formerly Transco Companies.

A Summary of the 500s' Rankings

Cash flow ($000)	Share data: 1982 — Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
551,253	95,327	NYSE	TXO	2.59	0.26	34	Dallas, Tex	3.4	**Forrest E Hoglund**
680,406	114,182	NYSE	TXU	3.85	2.00	23½	Dallas, Tex	16.1	**T Louis Austin Jr**
135,600	34,190	NYSE	TXT	2.30	1.80	23¾	Providence, RI	45.0	**Robert P Straetz**
50,669	5,601	NASDAQ	TDAT	4.83	1.15	21¾	Nashville, Tenn	3.1	**Charles J Kane**
36,141	9,956	NYSE	TFD	1.84	0.80	18⅝	Los Angeles, Cal	14.0	**Leonard H Straus**
144,295	16,527	NYSE	TDW	4.12	0.88	25¾	New Orleans, La	4.0	**John P Laborde**
–67,564	16,936	NYSE	TGR	–8.04	none	8½	Los Angeles, Cal	13.6	**Wayne M Hoffman**
299,709	56,766	NYSE	TL	2.45	1.00	52⅛	New York, NY	25.5	**J Richard Munro**
256,380	34,171	NYSE	TMC	4.09	2.00	62⅜	Los Angeles, Cal	27.2	**Robert F Erburu**
80,238	11,296	NYSE	TKR	–0.27	3.00	50¾	Canton, Ohio	18.2	**William R Timken Jr**
129,273	26,223	NYSE	TED	3.18	2.36	21	Toledo, Ohio	2.4	**John P Williamson**
317,209	18,792	NYSE	TMK	4.01	1.50	26⅛	Birmingham, Ala	6.2	**Frank P Samford Jr**
146,331	18,521	NYSE	TOS	5.48	1.00	11⅛	Los Angeles, Cal	3.1	**Morton M Winston**
78,348	35,067	NYSE	TOY	1.75	none	40¾	Rochelle Park, NJ	10.9	**Charles Lazarus**
276,221	22,389	NYSE	TW	0.25	none	28½	New York, NY	94.7	**L Edwin Smart**
650,951	62,974	NYSE	TA	2.86	1.43	23⅜	San Francisco, Cal	27.6	**James R Harvey**
525,014	23,698	NYSE	E	5.26	1.80	25⅝	Houston, Tex	3.2	**William J Bowen**
–22,388	3,783	NYSE	TFC	–6.41	none	5⅝	Cleveland, Ohio	0.7	**Warner B Bishop**
3,059,300	83,982	NYSE	TIC	3.67	1.64	24⅛	Hartford, Conn	29.1	**Edward H Budd**
80,702	14,985	NASDAQ	TRGA	3.54	0.85	25¼	Atlanta, Ga	4.5	**Robert Strickland**
268,359	35,330	NYSE	TRW	5.49	2.55	67⅝	Cleveland, Ohio	88.5	**Ruben F Mettler**
209,590	22,641	NYSE	TEP	3.11	1.92	24¾	Tucson, Ariz	1.2	**Theodore M Welp**
13,940	1,862	ASE	TUR	5.43	1.80	30¾	New York, NY	2.5	**Walter B Shaw**
383,202	29,610	NYSE	UAL	0.36	none	33¼	Elk Grove Township, Ill	57.0	**Richard J Ferris**
271,446	24,344	NYSE	UCC	5.10	3.00	60¼	Wayne, NJ	16.0	**Peter J McLaughlin**
714,400	70,153	NYSE	UK	4.47	3.40	52⅞	Danbury, Conn	106.7	**Warren M Anderson**
181,397	84,414	NYSE	UEP	2.17	1.58	13¾	St Louis, Mo	7.2	**Charles J Dougherty**
1,987,100	173,643	NYSE	UCL	4.63	1.00	26⅝	Los Angeles, Cal	19.7	**Fred L Hartley**
788,137	114,319	NYSE	UNP	3.38	1.80	47	New York, NY	28.0	**William S Cook**
77,140	26,817	NYSE	R	0.78	none	11¾	Middlebury, Conn	22.7	**Joseph P Flannery**
48,975	9,180	NASDAQ	UBKS	2.19	1.00	15½	Denver, Colo	3.2	**N Berne Hart**
31,510	12,217	NYSE	UB	0.06	0.35	8½	New York, NY	48.5	**Seymour Milstein**
398,659	27,820	NYSE	UER	6.42	2.22	27⅛	Houston, Tex	4.1	**J Hugh Roff Jr**
62,255	10,694	NYSE	UIL	5.39	2.88	25½	New Haven, Conn	1.5	**John D Fassett**
31,850	5,751	NYSE	UJB	3.17	1.15	18⅜	Princeton, NJ	2.9	**T Joseph Semrod**
42,887	6,082	NASDAQ	UMSB	4.84	0.91	23	Kansas City, Mo	2.0	**R Crosby Kemper**
119,767	17,817	NASDAQ	USBC	2.91	0.99	18	Portland, Ore	5.5	**John A Elorriaga**
114,522	16,616	NYSE	USG	2.61	2.40	50½	Chicago, Ill	15.7	**Graham J Morgan**
78,950	10,672	NYSE	USR	5.43	1.31	54⅞	Cincinnati, Ohio	24.5	**Philip G Barach**
620,000	102,098	NYSE	X	–3.75	1.75	21	Pittsburgh, Pa	120.0	**David M Roderick**
69,818	27,735	NYSE	UBO	2.01	0.93	23⅜	Greenwich, Conn	3.2	**Louis F Bantle**
24,393	4,500	NASDAQ	USTC	3.42	1.32	31½	New York, NY	1.6	**Daniel P Davison**
789,998	54,300	NYSE	UTX	6.73	2.40	56⅝	Hartford, Conn	186.8	**Harry J Gray**
639,299	81,391	NYSE	UT	2.49	1.72	20⅞	Westwood, Kan	29.8	**Paul H Henson**
68,475	5,986	NASDAQ	UVBK	7.21	2.18	48¼	Richmond, Va	4.8	**Joseph A Jennings**
43,853	8,702	NYSE	UVV	3.93	1.61	26⅝	Richmond, Va	14.0	**Gordon L Crenshaw**
191,562	30,227	NYSE	UPJ	4.18	2.28	46⅜	Kalamazoo, Mich	21.3	**Ray T Parfet Jr**
146,753	19,833	NYSE	U	3.35	0.12	33¼	Washington, DC	10.9	**Edwin I Colodny**
800,199	28,811	NYSE	FG	3.98	3.50	45⅜	Baltimore, Md	9.0	**Jack Moseley**

All share data adjusted for stock splits and stock dividends through May 9, 1983.

The Dimensions of American Business

Where they rank: 1982								
Assets	Sales	Market value	Net profits	Company (fiscal year end)	Assets ($000)	Sales ($000)	Market value of common ($000)	Net profit ($000)
293	■	■	350	USLIFE (Dec)	3,220,580	899,668	427,478	78,650
345	■	273	222	Utah Power & Light (Dec)	2,736,488	782,070	1,066,569	133,443
■	327	■	338	Valero Energy (Dec)	1,226,634	1,901,132	537,986	81,650
110	■	■	473	Valley National (Dec)	7,183,032	807,330	295,085	50,543
■	■	458	■	Varian Associates (Sept)	524,141	691,199	610,852	26,500
■	■	431	301	VF (Dec)	455,983	879,528	648,820	91,623
105	279	152	91	Virginia Electric & Power (Dec)	7,359,356	2,360,770	1,718,071	278,589
237	■	■	■	Virginia National Bankshares (Dec)	3,874,158	444,364	172,422	31,397
■	■	453	450	Vulcan Materials (Dec)	710,319	719,407	618,408	54,660
116	■	■	457	Wachovia (Dec)	6,916,367	809,757	490,971	53,432
■	190	68	240	Wal-Mart Stores (Jan)	1,188,000	3,347,743	3,352,199	124,140
■	401	■	■	Waldbaum (Dec)	273,134	1,491,363	100,947	16,825
■	312	320	445	Walgreen (Aug)	616,434	2,039,496	858,559	56,064
■	473	53	268	Wang Laboratories (June)	1,187,865	1,159,309	3,711,867	107,139
298	151	114	100	Warner Communications (Dec)	3,186,355	3,989,985	2,140,282	257,811
323	199	109	160	Warner-Lambert (Dec)	2,906,357	3,245,967	2,253,418	174,970
280	■	■	■	Washington National (Dec)	3,289,737	914,300	264,054	24,602
■	■	363	465	Washington Post (Dec)	501,223	800,824	780,793	52,413
■	■	■	427	Washington Water Power (Dec)	1,069,175	346,853	368,852	59,388
■	■	98	270	Waste Management (Dec)	1,169,681	966,548	2,521,295	106,524
27	195	448	211	Wells Fargo (Dec)	24,814,047	3,290,312	634,438	138,638
■	■	465	■	Wendy's International (Dec)	455,958	604,290	595,910	44,102
■	496	■	■	West Point-Pepperell (Aug)	651,401	1,110,573	392,768	43,067
■	■	■	442	Western Company of North America (Dec)	1,257,324	688,306	389,923	56,650
369	■	■	■	[29]Western Savings & Loan Association (Dec)	2,619,529	268,589	30,910	–38,656
455	■	271	335	Western Union (Dec)	2,045,119	1,024,950	1,071,494	82,312
88	44	65	41	Westinghouse Electric (Dec)	8,427,300	9,745,400	3,399,113	449,300
■	408	406	414	Westvaco (Oct)	1,342,998	1,449,664	695,054	63,093
■	323	■	■	Wetterau (Mar)	327,061	1,957,198	137,083	1,849
140	138	38	208	Weyerhaeuser (Dec)	5,924,391	4,186,224	4,593,744	140,016
■	287	173	210	Whirlpool (Dec)	1,261,642	2,271,305	1,593,813	139,015
■	318	■	■	White Consolidated Industries (Dec)	1,200,088	1,989,563	481,212	31,760
454	■	■	■	Whitney Holding (Dec)	2,046,996	237,512	292,084	38,200
■	358	■	429	Whittaker (Oct)	919,664	1,673,604	363,600	58,688
483	251	■	■	Wickes Cos (Jan)	1,912,985[30]	2,638,215	56,401	–248,682
■	■	479	■	Willamette Industries (Dec)	966,328	928,745	575,423	5,349
407	356	■	■	Williams Cos (Dec)	2,369,791	1,691,315	506,124	34,333
■	294	■	■	Wilson Foods (July)	284,836	2,232,600	56,451	12,909
■	69	252	279	Winn-Dixie Stores (June)	1,039,600	6,764,472	1,124,791	103,513
410	436	376	227	Wisconsin Electric Power (Dec)	2,354,563	1,302,910	755,664	131,649
■	■	■	493	Wisconsin Power & Light (Dec)	929,809	512,477	294,792	47,359
■	435	■	■	Witco Chemical (Dec)	661,679	1,305,418	259,930	29,842
380	104	356	■	F W Woolworth (Jan)	2,489,000	5,124,000	792,422	–353,000
■	■	■	443	Wyman-Gordon (Dec)	378,909	473,070	491,360	56,386
97	52	77	45	Xerox (Dec)	7,667,700	8,455,600	3,166,186	423,700
■	■	■	290	Zapata (Sept)	1,168,463	537,094	310,473	95,346
■	299	■	■	Zayre (Jan)	747,649	2,195,343	511,315	35,176
■	453	■	■	Zenith Radio (Dec)	682,900	1,239,200	272,119	–21,801
428	■	■	■	Zions Utah Bancorporation (Dec)	2,213,581	267,440	145,496	22,322

■ Not on 500 list.

[29]Formerly Western Financial.

[30]Assets as of 10/31/82.

NA: not available.

A Summary of the 500s' Rankings

Cash flow ($000)	Shares outstanding (000)	Where traded	Ticker symbol	Primary earnings	Dividends	Market price (Dec. 31)	Corporate headquarters	Number of employees (000)	Chief executive
	Share data: 1982								
210,325	18,586	NYSE	USH	3.50	0.85	23	New York, NY	4.0	**Gordon E Crosby Jr**
226,615	50,789	NYSE	UTP	2.38	2.24	21	Salt Lake City, Utah	4.4	**Harry Blundell**
137,744	22,185	NYSE	VLO	3.21	0.34	24¼	San Antonio, Tex	1.9	**William E Greehey**
114,563	16,862	NASDAQ	VNCP	3.00	1.16	17½	Phoenix, Arix	7.0	**Roger A Lyon**
37,162	18,868	NYSE	VAR	1.48	0.26	32⅜	Palo Alto, Cal	12.7	**Thomas D Sege**
107,297	16,374	NYSE	VFC	5.63	1.30	39⅝	Wyomissing, Pa	20.5	**Lawrence R Pugh**
612,873	119,518	NYSE	VEL	1.98	1.53	14⅜	Richmond, Va	12.2	**William W Berry**
48,798	7,579	NASDAQ	VNAT	4.23	1.45	22¾	Norfolk, Va	4.7	**Clifford A Cutchins III**
126,451	11,452	NYSE	VMC	4.73	2.44	54	Birmingham, Ala	5.9	**W Houston Blount**
78,068	15,403	NYSE	WB	3.33	1.28	31⅞	Winston-Salem, NC	6.3	**John G Medlin Jr**
164,443	67,212	NYSE	WMT	1.82	0.17	49⅞	Bentonville, Ark	43.5	**Sam M Walton**
35,353	2,622	NASDAQ	WALD	6.29	none	38½	Central Islip, NY	6.5	**Ira Waldbaum**
94,690	30,594	NYSE	WAG	1.87	0.53	28⅛	Deerfield, Ill	31.0	**Charles R Walgreen III**
189,012	125,826	ASE	WAN B	0.88	0.07	29½	Lowell, Mass	17.7	**An Wang**
352,490	63,889	NYSE	WCI	3.96	1.00	33½	New York, NY	22.1	**Steven J Ross**
244,401	79,767	NYSE	WLA	2.20	1.40	28¼	Morris Plains, NJ	43.5	**Ward S Hagan**
201,359	10,833	NYSE	WNT	2.07	1.08	24⅜	Evanston, Ill	6.1	**Stanley P Hutchison**
81,302	14,132	ASE	WPO B	3.70	0.56	55¼	Washington, DC	5.4	**Katharine Graham**
69,194	17,776	NYSE	WWP	3.17	2.40	20¾	Spokane, Wash	1.4	**Wendell J Satre**
197,952	47,127	NYSE	WMX	2.40	0.46	53½	Oak Brook, Ill	14.3	**Dean L Buntrock**
275,650	23,607	NYSE	WFC	5.81	1.92	26⅞	San Francisco, Cal	17.8	**Carl E Reichardt**
74,047	40,746	NYSE	WEN	1.13	0.20	14⅝	Dublin, Ohio	27.5	**Robert L Barney**
83,849	10,235	NYSE	WPM	4.27	1.80	38⅜	West Point, Ga	22.0	**Joseph L Lanier Jr**
131,109	43,935	NYSE	WSN	1.27	0.24	8⅞	Fort Worth, Tex	6.4	**John A Fanning**
–34,296	2,078	ASE	WFN	–19.52	none	14⅞	Phoenix, Ariz	1.1	**Gary H Driggs**
229,120	23,944	NYSE	WU	3.34	1.40	44¾	Upper Saddle River, NJ	15.0	**Robert M Flanagan**
746,800	87,437	NYSE	WX	5.16	1.80	38⅞	Pittsburgh, Pa	145.3	**Robert E Kirby**
173,038	26,862	NYSE	W	2.40	1.20	25⅞	New York, NY	14.9	**David L Luke III**
16,011	7,669	NASDAQ	WETT	0.25	0.80	17⅞	Hazelwood, Mo	4.6	**Ted C Wetterau**
573,258	127,604	NYSE	WY	0.90	1.30	36	Tacoma, Wash	41.8	**George H Weyerhaeuser**
232,522	36,430	NYSE	WHR	3.83	1.65	43¾	Benton Harbor, Mich	19.1	**Jack D Sparks**
86,021	13,367	NYSE	WSW	2.10	1.50	36	Cleveland, Ohio	24.4	**Roy H Holdt**
52,800	2,132	OTC	–	17.88	7.50	137	New Orleans, La	0.9	**Patrick A Delaney**
80,528	14,400	NYSE	WKR	3.77	1.60	25¼	Los Angeles, Cal	17.2	**Joseph F Alibrandi**
NA	14,555	NYSE	QWIX	–17.12	none	3⅞	Santa Monica, Cal	34.8	**Sanford C Sigoloff**
72,788	15,243	NASDAQ	WMTT	0.35	1.50	37¾	Portland, Ore	8.2	**William Swindells Jr**
163,257	29,772	NYSE	WMB	1.15	1.20	17	Tulsa, Okla	6.6	**Joseph H Williams**
25,799	5,865	NASDAQ	WILF	2.55	none	9⅝	Oklahoma City, Okla	9.1	**Kenneth J Griggy**
215,226	25,135	NYSE	WIN	4.18	2.28	44¾	Jacksonville, Fla	63.8	**A Dano Davis**
260,026	33,216	NYSE	WPC	3.60	1.90	22¾	Milwaukee, Wisc	6.2	**Charles S McNeer**
107,151	12,283	NYSE	WPL	3.51	2.20	24	Madison, Wisc	2.4	**James R Underkofler**
76,176	9,452	NYSE	WIT	3.15	1.80	27½	New York, NY	8.1	**William Wishnick**
638,000	30,625	NYSE	Z	–11.71	1.80	25⅞	New York, NY	152.1	**John W Lynn**
79,310	19,269	NASDAQ	WYMN	2.95	0.80	25½	Worcester, Mass	3.8	**Joseph R Carter**
1,538,300	84,714	NYSE	XRX	5.00	3.00	37⅜	Stamford, Conn	113.9	**David T Kearns**
206,272	19,106	NYSE	ZOS	4.73	0.72	16¼	Houston, Tex	5.3	**Ronald C Lassiter**
68,543	8,331	NYSE	ZY	4.74	0.38	61⅜	Framingham, Mass	33.0	**Maurice Segall**
6,700	18,930	NYSE	ZE	–1.15	0.15	14⅜	Glenview, Ill	26.0	**Revone W Kluckman**
35,946	5,596	NASDAQ	ZION	3.75	0.91	26	Salt Lake City, Utah	1.5	**Roy W Simmons**

All share data adjusted for stock splits and stock dividends through May 9, 1983.

General notes: 1) List includes U.S.-based publicly owned companies. 2) Sales figures exclude excise taxes. 3) Market value is derived by multiplying the Dec. 31, 1982 closing price of the common stock by the number of shares outstanding at that date 4) Net profits, cash flow and primary earnings per share include discontinued operations before extraordinary items. Companies with insurance operations exclude realized gains or losses. 5) Cash flow is total funds provided from operations. 6) Indicated dividend is shown for companies formed due to merger. 7) 1982 figures were used for those February fiscal-year companies for which 1983 results were not available at press time

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The country's 808 largest companies cut nearly three-quarters of a million jobs from their payrolls in 1982. Has the bottom been reached in a long and difficult downsizing?

Productivity is painful

The tables that follow rank the 808 companies that appear on one or more of The Forbes 500s lists by the number of people they employ, the assets that stand behind those employees, and the sales and profits, on average, each of them produces.

Overall, these 808 big companies employed 21.6 million people, or one out of every five working Americans, and in 1982 they cut 743,000 jobs from their payrolls.

Here's a look at the year-to-year comparisons:

	1982	1981	Change
Total jobs:	21,611,700	22,355,000	–3.3%
Average sales per employee:	$193,500	$184,600	+4.8%
Average profits per employee:	$ 10,000	$ 10,200	–2.0%
Average assets per employee:	$628,300	$576,800	+8.9%

The most important numbers are in the last three columns of each company listing, showing sales, profits and assets per employee. They can give a rough idea of how well each business uses its people. But be careful about extremes at either end, which can be misleading. Banks, for example, will show high per-employee assets, while energy companies ordinarily will have greater per-employee sales and profits figures than labor-intensive businesses like retailers. The best way to use these tables is to compare companies in the same business and with roughly the same per-worker asset base.

Of those 21.6 million workers, about one in five is employed by the top ten companies on the list. In 1982 these ten big employers trimmed 5%, or some 200,000 jobs, from their work force—a significantly greater percentage decrease, in other words, than the 3.3% cut by the 808 overall. Only IBM and Sears, Roebuck among the top ten employed more workers in 1982 than in 1981. In contrast, General Motors alone cut its work force by 84,000—part of the long downsizing in the automobile industry that since 1979 has seen GM, Ford and Chrysler together slash nearly 350,000 jobs.

Productivity is painful.

Rank	Company	Employees (000)	Per employee ($000) Sales (rank)	Profits (rank)	Assets (rank)
1	American Tel & Tel	1,015.9	64.1 (713)	6.9 (387)	145.9 (405)
2	General Motors	657.0	91.4 (552)	1.5 (673)	63.0 (589)
3	Sears, Roebuck	401.8	74.7 (639)	2.1 (637)	91.2 (495)
4	Ford Motor	379.2	97.7 (514)	–1.7 (759)	57.9 (623)
5	General Electric	367.0	72.2 (658)	5.0 (467)	58.9 (614)
6	IBM	359.9	95.5 (526)	12.3 (216)	90.4 (497)
7	Intl Tel & Tel	303.5	72.2 (658)	2.3 (624)	96.1 (480)
8	K mart	245.0	68.5 (681)	1.1 (698)	30.0 (756)
9	GTE	200.0	60.3 (731)	4.2 (497)	111.5 (452)
10	Mobil	197.2	304.0 (83)	7.0 (380)	184.8 (377)
11	United Technologies	186.8	72.7 (654)	2.3 (624)	42.8 (691)
12	J C Penney	176.0	64.9 (710)	2.2 (629)	45.1 (679)
13	Exxon	173.0	561.7 (32)	24.2 (96)	360.0 (328)
14	E I du Pont	171.1	194.1 (218)	5.2 (460)	142.3 (408)
15	Safeway Stores	156.9	112.4 (442)	1.0 (705)	24.8 (781)
16	F W Woolworth	152.1	33.7 (797)	–2.3 (762)	16.4 (803)
17	Westinghouse Elec	145.3	67.1 (689)	3.1 (572)	58.0 (622)
18	Eastman Kodak	136.5	79.3 (619)	8.5 (323)	77.8 (540)
19	Goodyear	131.1	66.3 (694)	1.9 (649)	39.6 (710)
20	McDonald's	130.7	20.8 (806)	2.3 (624)	25.0 (780)
21	Kroger	129.6	91.8 (548)	1.1 (698)	21.1 (798)
22	PepsiCo	126.5	59.3 (734)	1.8 (657)	33.2 (746)
23	Federated Dept Stores	124.6	61.8 (723)	1.9 (649)	36.7 (725)
24	United States Steel	120.0	153.1 (295)	–3.0 (767)	162.0 (392)
25	ARA Services	115.0	24.4 (803)	0.3 (736)	10.5 (808)
26	Gulf & Western Inds	114.5	56.1 (742)	1.5 (673)	95.2 (482)
27	RCA	114.3	81.7 (607)	1.9 (649)	113.2 (448)
28	Xerox	113.9	74.2 (645)	3.7 (526)	67.3 (567)
29	Union Carbide	106.7	84.9 (586)	2.9 (581)	99.5 (472)
30	Rockwell Intl	101.9	72.6 (656)	3.3 (560)	47.8 (670)
31	Tenneco	99.8	150.1 (301)	8.2 (333)	174.1 (383)
32	Halliburton	96.5	75.5 (635)	5.1 (464)	57.8 (624)
33	Boeing	95.7	94.4 (534)	3.0 (577)	79.3 (531)
34	Marriott	95.5	26.6 (802)	1.0 (705)	21.6 (794)
35	Honeywell	95.5	57.5 (740)	2.8 (588)	46.8 (675)
36	Trans World	94.7	53.9 (758)	0.3 (736)	37.3 (722)
37	R J Reynolds Inds	92.8	117.5 (417)	9.4 (291)	111.6 (451)
38	Sperry	90.6	61.5 (726)	2.4 (615)	59.0 (612)

Ranking The Forbes 500s—Jobs And Productivity

Rank	Company	Employees (000)	Per employee ($000) Sales (rank)	Profits (rank)	Assets (rank)
39	Minn Mining & Mfg	89.4	73.8 (647)	7.1 (377)	61.7 (595)
40	Consolidated Foods	88.9	67.9 (684)	1.8 (657)	27.0 (771)
41	TRW	88.5	58.0 (739)	2.2 (629)	35.3 (736)
42	BankAmerica	86.4	173.1 (249)	4.5 (482)	1414.8 (69)
43	Household Intl	86.0	90.3 (561)	1.5 (673)	95.8 (481)
44	W R Grace	85.6	71.6 (662)	3.7 (526)	57.4 (626)
45	Texas Instruments	81.9	52.9 (762)	1.8 (657)	32.1 (751)
46	Hospital Corp of Am	80.0	37.2 (794)	2.1 (637)	45.0 (680)
46	Beatrice Foods	80.0	112.8 (440)	4.5 (482)	59.3 (610)
48	Dart & Kraft	79.9	124.8 (380)	4.4 (486)	64.2 (582)
49	Motorola	79.8	47.4 (783)	2.1 (637)	35.5 (734)
50	General Dynamics	79.8	77.2 (629)	1.7 (663)	33.1 (748)
51	Johnson & Johnson	78.4	73.5 (650)	6.7 (394)	53.7 (644)
52	Dayton-Hudson	77.5	73.0 (652)	2.7 (596)	38.5 (716)
53	Litton Industries	75.9	65.2 (707)	4.2 (497)	50.6 (664)
54	Raytheon	74.3	74.3 (643)	4.3 (490)	47.3 (673)
55	Chrysler	73.7	136.3 (344)	1.4 (681)	85.0 (510)
56	General Mills	73.6	72.2 (658)	3.1 (572)	36.7 (725)
57	McDonnell Douglas	73.4	99.9 (505)	2.9 (581)	63.0 (589)
58	Caterpillar Tractor	73.2	88.3 (570)	–2.5 (764)	98.3 (474)
59	Philip Morris	72.0	126.4 (374)	10.9 (246)	134.6 (415)
60	Lockheed	70.8	79.3 (619)	2.9 (581)	34.8 (741)
61	Firestone	69.0	56.1 (742)	0.0 (744)	38.7 (715)
62	May Dept Stores	68.7	53.5 (759)	2.1 (637)	38.2 (720)
63	Bethlehem Steel	66.9	78.6 (624)	–22.0 (797)	68.9 (561)
64	Hewlett-Packard	66.0	64.5 (712)	5.8 (440)	52.6 (651)
65	City Investing	65.1	88.6 (568)	1.3 (688)	116.0 (445)
66	Digital Equipment	65.1	59.7 (732)	6.4 (407)	61.9 (592)
67	Allied Stores	65.0	50.0 (775)	1.4 (681)	35.1 (738)
67	Lucky Stores	65.0	122.7 (394)	1.4 (681)	24.8 (781)
69	Burroughs	64.5	63.5 (715)	1.4 (681)	64.0 (585)
70	NCR	64.0	55.1 (750)	3.7 (526)	52.7 (650)
71	Winn-Dixie Stores	63.8	106.1 (475)	1.6 (666)	16.3 (804)
72	Texaco	63.5	739.6 (22)	20.2 (121)	426.8 (301)
73	CSX	63.0	78.0 (627)	5.4 (452)	128.8 (419)
74	Procter & Gamble	62.4	192.2 (222)	12.5 (211)	120.4 (434)
75	Singer	62.0	40.7 (790)	–0.4 (749)	22.9 (790)
75	American Stores	62.0	121.1 (397)	1.5 (673)	23.3 (788)
77	Borg-Warner	61.7	51.8 (767)	2.7 (596)	39.9 (708)
78	American Express	61.2	132.3 (353)	9.5 (288)	462.9 (291)
79	Ralston Purina	61.1	78.6 (624)	1.1 (698)	34.6 (743)
80	Associated Dry Goods	60.5	52.7 (763)	1.3 (688)	28.1 (766)
81	Dow Chemical	60.2	176.4 (247)	5.7 (441)	196.1 (372)
82	Armco	59.8	104.9 (483)	–5.9 (780)	103.7 (465)
83	Citicorp	59.4	299.9 (91)	12.2 (219)	2188.5 (37)
84	Melville	59.4	54.9 (753)	2.4 (615)	21.0 (799)
85	General Foods	58.5	142.8 (321)	3.4 (547)	66.0 (575)
85	Burlington Inds	58.5	49.2 (778)	0.9 (715)	35.0 (739)
87	Control Data	58.3	73.6 (648)	2.6 (601)	118.5 (438)
88	Standard Oil Ind	58.2	482.0 (45)	31.4 (58)	417.1 (307)
89	Nabisco Brands	57.8	101.7 (498)	5.4 (452)	63.9 (586)
90	Pillsbury	57.6	58.8 (738)	2.4 (615)	42.2 (698)
91	UAL	57.0	93.3 (541)	0.2 (741)	80.3 (528)
92	Signal Cos	56.5	89.0 (566)	2.0 (646)	63.9 (586)
93	Carter Hawley Hale	55.5	55.0 (752)	0.9 (715)	33.9 (745)
94	Gulf Oil	55.0	516.9 (38)	16.4 (156)	371.6 (324
95	Monsanto	54.8	115.4 (424)	6.0 (423)	110.9 (453
96	Deere	54.6	84.4 (591)	1.0 (705)	108.7 (456
97	Intl Harvester	54.5	78.8 (621)	–30.5 (802)	67.9 (565
98	Standard Oil Ohio	53.3	247.0 (146)	35.3 (41)	300.7 (348
99	Atlantic Richfield	52.9	500.2 (41)	31.7 (56)	408.9 (312
100	Interco	52.8	48.7 (781)	1.6 (666)	29.3 (761
101	Emerson Electric	52.7	66.5 (692)	5.7 (441)	44.0 (685
102	American Home Prod	51.9	88.2 (571)	10.8 (248)	54.5 (640
103	Allied Corp	51.3	120.3 (402)	5.3 (456)	122.3 (428
104	Dresser Industries	51.0	81.7 (607)	3.4 (547)	64.9 (579
105	Occidental Petroleum	50.8	358.2 (77)	3.1 (572)	310.2 (344
106	American Brands	50.1	91.0 (554)	7.6 (359)	124.8 (423
107	Southland	49.8	135.8 (347)	2.2 (629)	37.0 (724
108	Burlington Northern	49.5	84.9 (586)	5.7 (441)	117.2 (442
109	R H Macy	49.0	60.8 (727)	2.8 (588)	33.0 (749
110	Owens-Illinois	48.8	73.6 (648)	0.8 (720)	61.4 (597
111	Continental Group	48.7	114.3 (430)	3.7 (526)	117.6 (441
112	United Brands	48.5	81.9 (604)	0.1 (743)	26.1 (776
113	Beverly Enterprises	48.0	17.0 (808)	0.5 (729)	19.4 (801
114	IC Industries	47.6	81.2 (611)	1.0 (705)	83.1 (515
115	North Amer Philips	47.4	66.8 (691)	1.6 (666)	38.5 (716
116	Greyhound	47.2	105.7 (479)	2.2 (629)	85.9 (509
117	Southern Pacific	47.2	65.8 (701)	2.5 (610)	116.8 (444
118	Allegheny Intl	46.7	60.7 (728)	1.0 (705)	44.5 (682
119	Aetna Life & Cas	46.7	303.3 (84)	11.2 (242)	946.7 (165
120	Levi Strauss	46.5	55.3 (748)	2.7 (596)	34.9 (740
121	Teledyne	45.5	88.8 (567)	6.4 (407)	122.2 (430
122	Kidde	45.0	59.0 (737)	1.9 (649)	42.4 (696
122	Textron	45.0	65.2 (707)	1.9 (649)	45.3 (678
124	Eaton	44.6	54.9 (753)	–4.2 (774)	45.5 (677
125	Georgia-Pacific	44.0	122.8 (392)	1.2 (694)	117.0 (443
126	Colgate-Palmolive	43.7	111.9 (444)	4.5 (482)	58.9 (614
127	Fluor	43.6	168.1 (257)	3.5 (543)	107.7 (458
128	Combustion Eng	43.5	82.0 (603)	3.6 (536)	64.9 (579
129	Wal-Mart Stores	43.5	77.0 (630)	2.9 (581)	27.3 (769
129	Warner-Lambert	43.5	74.6 (640)	4.0 (510)	66.8 (57
131	Sun Company	43.3	358.8 (76)	12.4 (213)	277.9 (355
132	Holiday Inns	42.7	33.4 (798)	1.8 (657)	40.0 (706
133	American Standard	42.6	49.9 (776)	0.8 (720)	35.7 (73
134	Standard Oil Calif	42.5	808.4 (19)	32.4 (53)	552.1 (256
135	Great Atl & Pac Tea	42.5	108.4 (464)	0.5 (729)	25.7 (778
136	LTV	42.4	112.8 (440)	–3.7 (771)	95.0 (483
137	H J Heinz	42.0	87.8 (572)	4.6 (476)	50.7 (663
138	Weyerhaeuser	41.8	100.2 (503)	3.4 (547)	141.8 (409
139	AMR	41.6	100.5 (500)	–0.5 (750)	93.8 (48
140	Norfolk Southern	41.3	81.4 (610)	10.0 (268)	164.9 (38
141	Ingersoll-Rand	41.1	67.5 (686)	1.3 (688)	58.4 (61
142	Martin Marietta	41.1	85.9 (583)	2.2 (629)	69.1 (56
143	American Cyanamid	41.0	84.2 (594)	3.2 (564)	73.1 (54
144	CIGNA	40.9	287.9 (99)	12.0 (223)	766.9 (19
145	Alcoa	40.9	113.6 (434)	–0.2 (745)	146.4 (40
146	Pfizer	40.8	84.8 (588)	8.2 (333)	92.0 (49
147	Campbell Soup	40.2	73.3 (651)	3.7 (526)	46.4 (67
148	Humana	39.8	38.1 (793)	3.2 (564)	43.9 (68

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Ranking The Forbes 500s—Jobs And Productivity

Rank	Company	Employees (000)	Per employee ($000) Sales (rank)	Profits (rank)	Assets (rank)
149	Champion Intl	39.4	94.9 (532)	1.0 (705)	88.2 (504)
150	Coca-Cola	39.4	158.8 (275)	13.0 (199)	125.1 (421)
151	CPC International	38.7	105.6 (480)	6.0 (423)	62.3 (591)
152	Penn Central	38.7	81.8 (605)	3.4 (547)	80.1 (529)
153	Eastern Air Lines	38.5	98.0 (512)	–1.9 (760)	83.9 (513)
154	Norton Simon	37.5	78.7 (623)	2.1 (637)	58.5 (616)
155	Delta Air Lines	37.4	96.8 (517)	0.6 (725)	71.1 (555)
156	Jewel Cos	37.2	149.8 (303)	2.4 (615)	39.6 (710)
157	Merrill Lynch	37.2	135.2 (350)	8.3 (328)	556.6 (253)
158	Pan Am Wrld Arwys	37.0	100.4 (502)	–13.1 (793)	72.9 (549)
159	PPG Industries	37.0	89.8 (563)	4.2 (497)	88.4 (503)
160	Natl Semiconductor	37.0	29.8 (800)	–0.3 (748)	21.2 (797)
161	Shell Oil	36.9	543.8 (35)	43.5 (26)	579.5 (247)
162	American Can	36.8	110.4 (454)	–3.6 (769)	71.9 (552)
163	Santa Fe Industries	36.5	86.5 (579)	4.9 (469)	129.6 (417)
164	Northwest Industries	36.5	63.2 (719)	5.1 (464)	54.8 (637)
165	FMC	36.4	96.0 (520)	4.2 (497)	75.9 (543)
166	Avon Products	36.1	83.1 (599)	5.4 (452)	61.9 (592)
167	Castle & Cooke	36.0	50.6 (771)	0.3 (736)	31.0 (753)
168	J P Stevens	35.9	50.6 (771)	0.6 (725)	29.8 (758)
169	Chase Manhattan	35.5	286.7 (100)	8.7 (314)	2279.1 (34)
170	Bristol-Myers	35.3	102.0 (496)	9.9 (270)	78.1 (536)
171	SmithKline Beckman	35.2	84.3 (593)	12.6 (209)	81.1 (523)
172	IU International	35.0	59.1 (736)	1.0 (705)	36.6 (727)
173	Cooper Industries	34.9	68.5 (681)	3.9 (516)	58.3 (620)
174	International Paper	34.9	115.2 (427)	4.6 (476)	159.7 (395)
175	Wickes Cos	34.8	75.9 (634)	–7.2 (784)	55.0 (636)
176	Natl Medical Entrprs	34.2	34.2 (796)	2.2 (629)	35.2 (737)
177	Genl Tire & Rubber	34.0	60.6 (729)	0.6 (725)	51.2 (658)
178	Revlon	33.6	70.1 (674)	3.3 (560)	67.7 (566)
179	Northrop	33.5	73.9 (646)	0.2 (741)	40.4 (705)
180	Borden	33.2	123.8 (389)	5.0 (467)	78.0 (537)
181	Zayre	33.0	66.5 (692)	1.1 (698)	22.7 (791)
182	Ogden	32.8	67.2 (688)	1.8 (657)	51.7 (655)
183	Hilton Hotels	32.5	18.4 (807)	2.6 (601)	28.9 (763)
183	Ashland Oil	32.5	272.8 (112)	5.6 (446)	129.6 (417)
185	CBS	32.5	124.7 (381)	3.5 (543)	82.6 (517)
186	Merck	32.2	95.1 (530)	12.9 (201)	113.3 (447)
187	Dana	32.1	75.5 (635)	1.6 (666)	61.8 (594)
188	Kimberly-Clark	32.1	91.8 (548)	6.2 (416)	83.0 (516)
189	Phillips Petroleum	32.1	489.8 (42)	20.2 (121)	377.4 (323)
190	McGraw-Edison	32.0	70.7 (671)	1.6 (666)	50.8 (662)
191	First Interstate Bancp	31.9	144.4 (317)	6.9 (387)	1281.5 (93)
192	B F Goodrich	31.9	94.3 (536)	–1.0 (755)	74.4 (545)
193	Abbott Laboratories	31.8	81.8 (605)	9.1 (299)	80.7 (524)
194	Blue Bell	31.5	41.0 (789)	1.2 (694)	23.5 (787)
195	Amer Hospital Supply	31.5	94.4 (534)	7.3 (369)	64.2 (582)
196	Gillette	31.3	71.6 (662)	4.3 (490)	53.4 (646)
197	Inland Steel	31.0	90.6 (557)	–4.3 (775)	84.8 (511)
198	Walgreen	31.0	65.8 (701)	1.8 (657)	19.9 (800)
198	Albertson's	31.0	127.1 (371)	1.9 (649)	26.8 (772)
200	Corning Glass Works	30.9	51.2 (769)	2.4 (615)	58.3 (620)
201	Emhart	30.8	55.5 (746)	2.6 (601)	32.5 (750)
202	Esmark	30.7	107.6 (468)	3.5 (543)	57.3 (627)
203	Supermarkets General	30.5	106.5 (473)	1.2 (694)	22.7 (791)
204	Republic Steel	30.3	90.5 (558)	–8.1 (786)	100.3 (468
205	Baxter Travenol Labs	30.1	55.5 (746)	6.2 (416)	59.6 (608
206	Amer Medical Intl	30.0	38.5 (792)	2.6 (601)	40.7 (704
207	Reynolds Metals	29.9	99.7 (506)	–0.8 (751)	111.9 (450
208	United Telecom	29.8	81.1 (612)	6.8 (391)	159.4 (397
209	Southern Company	29.4	167.5 (260)	15.3 (166)	418.2 (306
210	Jack Eckerd	29.3	71.1 (666)	2.4 (615)	25.8 (777
211	Travelers	29.1	391.6 (65)	10.7 (252)	963.0 (162
212	Stop & Shop Cos	29.0	80.8 (614)	1.2 (694)	21.3 (796
213	Eli Lilly	29.0	102.3 (493)	14.2 (180)	109.0 (45
214	Tandy	28.5	71.3 (665)	7.9 (345)	43.1 (68
215	Quaker Oats	28.5	95.3 (529)	3.4 (547)	51.9 (65
216	Boise Cascade	28.4	102.5 (491)	0.3 (736)	93.7 (48
217	Grumman	28.0	71.7 (661)	0.9 (715)	35.8 (72
217	Union Pacific	28.0	208.2 (195)	11.7 (233)	357.7 (33
219	Transamerica	27.6	156.7 (283)	6.6 (400)	377.7 (32
220	Wendy's International	27.5	22.0 (804)	1.6 (666)	16.6 (80
221	Celanese	27.4	111.8 (445)	–1.2 (756)	104.5 (46
222	Loews	27.2	164.7 (265)	8.1 (340)	382.4 (32
223	Times Mirror	27.2	80.9 (613)	5.1 (464)	78.6 (53
224	Crown Zellerbach	27.1	108.9 (462)	–4.1 (772)	88.1 (50
225	Security Pacific	27.1	166.0 (263)	8.7 (314)	1367.1 (7
226	Mfrs Hanover	27.0	282.5 (107)	10.9 (246)	2367.9 (3
227	Brown Group	27.0	51.7 (768)	2.2 (629)	23.0 (78
228	St Regis Paper	26.9	95.0 (531)	1.7 (663)	106.0 (45
229	National Steel	26.9	145.3 (314)	–17.3 (795)	356.7 (33
230	Pitney Bowes	26.6	54.6 (755)	3.1 (572)	50.2 (66
231	General Instrument	26.6	36.0 (795)	3.4 (547)	29.1 (76
231	SCM	26.6	69.9 (675)	1.1 (698)	42.3 (69
233	Walt Disney	26.5	38.9 (791)	3.8 (521)	79.4 (53
234	Schering-Plough	26.4	69.0 (677)	7.0 (380)	92.2 (49
235	Pacific Gas & Elec	26.3	257.8 (131)	30.8 (61)	518.0 (26
236	Harris Corp	26.1	65.9 (699)	2.9 (581)	54.3 (64
237	Zenith Radio	26.0	47.7 (782)	–0.8 (751)	26.3 (77
237	Dun & Bradstreet	26.0	56.2 (741)	5.5 (448)	38.4 (71
239	Amfac	26.0	85.0 (585)	1.3 (688)	54.7 (63
240	Avco	25.8	95.4 (527)	2.3 (624)	234.1 (36
241	Morrison-Knudsen	25.7	92.0 (547)	1.5 (673)	34.8 (74
242	Baker International	25.6	99.2 (507)	9.7 (277)	97.1 (47
243	Time Inc	25.5	139.8 (331)	6.0 (423)	113.6 (44
243	Gannett	25.5	59.6 (733)	7.1 (377)	61.7 (59
245	American Elec Power	25.3	165.0 (264)	13.2 (194)	482.6 (28
246	Gould	25.0	66.1 (696)	3.7 (526)	63.8 (58
247	General Signal	24.8	65.4 (706)	4.3 (490)	49.3 (66
248	Sterling Drug	24.8	72.5 (657)	5.3 (456)	53.8 (64
249	Fruehauf	24.6	75.5 (635)	–1.2 (756)	60.9 (60
250	United States Shoe	24.5	51.2 (769)	2.5 (610)	24.1 (78
251	White Consolidated	24.4	81.5 (609)	1.3 (688)	49.2 (66
252	Manville	23.8	74.5 (641)	–4.1 (772)	94.1 (41
253	Tektronix	23.6	50.6 (771)	3.4 (547)	44.1 (61
254	Squibb	23.5	70.7 (671)	6.5 (405)	82.1 (5
255	American Intl Group	23.2	153.9 (291)	17.8 (143)	393.9 (3
256	Lear Siegler	23.0	64.7 (711)	3.1 (572)	39.6 (7
257	American Motors	23.0	125.4 (377)	–6.7 (782)	70.0 (5
258	Norton	22.9	55.2 (749)	0.8 (720)	44.0 (6

This advertisement is not an offering. No offering is made except by the Prospectus, copies of which have been filed with the Department of Law of the State of New York and the Bureau of Securities, Department of Law and Public Safety of the State of New Jersey. Neither the Attorney General of the State of New York nor the Bureau of Securities of the State of New Jersey has passed on or endorsed the merits of this offering.

New Issue / April 11, 1983

$300,294,000

Prudential Realty Securities, Inc.

Serial Zero Coupon Mortgage-Backed Bonds, Series A, Due April 1, 1984 through April 1, 1997

The Bonds are payable solely from the cash flow generated by the pool of underlying mortgage loans and other collateral securing the Bonds and no recourse may be had against the issuer or any of its other assets if such cash flow is not sufficient to pay the entire amount due on the Bonds. The Bonds and the underlying mortgage loans are not insured or guaranteed by the United States Government or any governmental agency.

AMOUNTS, MATURITIES AND PRICES

Amount Payable at Maturity	Due April 1	Price	Amount Payable at Maturity	Due April 1	Price
$26,029,000	1984	91.477%	$26,029,000	1991	42.686%
26,029,000	1985	82.366	25,960,000	1992	38.351
26,029,000	1986	73.942	23,740,000	1993	34.457
26,029,000	1987	66.437	19,218,000	1994	30.958
26,029,000	1988	59.552	13,190,000	1995	27.814
26,029,000	1989	53.255	7,287,000	1996	24.990
26,029,000	1990	47.904	2,667,000	1997	22.902

Copies of the Prospectus may be obtained in any State in which this announcement is circulated only from such of the undersigned as may legally offer these securities in such State.

Prudential-Bache Securities

Salomon Brothers Inc

Bear, Stearns & Co.

The First Boston Corporation

Blyth Eastman Paine Webber Incorporated

Dillon, Read & Co. Inc.

Donaldson, Lufkin & Jenrette Securities Corporation

Drexel Burnham Lambert Incorporated

Goldman, Sachs & Co.

E. F. Hutton & Company Inc.

Kidder, Peabody & Co. Incorporated

Lazard Frères & Co.

Lehman Brothers Kuhn Loeb Incorporated

Merrill Lynch White Weld Capital Markets Group Merrill Lynch, Pierce, Fenner & Smith Incorporated

L. F. Rothschild, Unterberg, Towbin

Shearson/American Express Inc.

Smith Barney, Harris Upham & Co. Incorporated

Warburg Paribas Becker A. G. Becker

Wertheim & Co., Inc.

Dean Witter Reynolds Inc.

Alex. Brown & Sons

A. G. Edwards & Sons, Inc.

Ladenburg, Thalmann & Co. Inc.

Moseley, Hallgarten, Estabrook & Weeden Inc.

Oppenheimer & Co., Inc.

Thomson McKinnon Securities Inc.

Tucker, Anthony & R. L. Day, Inc.

Ranking The Forbes 500s—Jobs And Productivity

Rank	Company	Employees (000)	Per employee ($000) Sales (rank)	Profits (rank)	Assets (rank)
259	Colt Industries	22.9	66.2 (695)	–7.1 (783)	52.1 (652)
260	Uniroyal	22.7	86.7 (577)	1.1 (698)	60.8 (604)
261	Consolidated Edison	22.7	223.2 (176)	21.7 (108)	346.7 (334)
262	Mead	22.4	119.3 (408)	–2.8 (766)	100.2 (469)
263	Sherwin-Williams	22.3	83.0 (600)	1.9 (649)	39.8 (709)
264	Hercules	22.2	111.3 (448)	3.9 (516)	90.2 (499)
265	Warner Commun	22.1	180.3 (237)	11.7 (233)	144.0 (407)
266	West Point-Pepperell	22.0	50.5 (774)	2.0 (646)	29.6 (760)
267	ENSERCH	21.9	172.6 (251)	7.2 (373)	140.3 (411)
268	Owens-Corning Fbrgls	21.9	108.4 (464)	1.4 (681)	73.0 (548)
269	Carnation	21.8	155.0 (287)	8.7 (314)	78.5 (535)
270	Allis-Chalmers	21.7	74.3 (643)	–9.5 (788)	55.6 (633)
271	Square D	21.7	48.8 (779)	3.3 (560)	37.2 (723)
272	Continental Telecom	21.6	84.2 (594)	7.0 (380)	178.9 (381)
273	Becton, Dickinson	21.4	52.2 (766)	3.6 (536)	51.0 (659)
274	Chesebrough-Pond's	21.3	76.2 (632)	5.9 (432)	49.0 (669)
275	Upjohn	21.3	86.2 (581)	5.9 (432)	94.6 (484)
276	Revco D S	20.9	74.4 (642)	2.4 (615)	24.0 (785)
276	Jim Walter	20.9	92.1 (545)	0.3 (736)	122.6 (425)
278	Cummins Engine	20.9	76.1 (633)	0.4 (732)	61.4 (597)
279	Armstrong World Inds	20.8	61.7 (725)	1.0 (705)	43.4 (688)
280	Parker-Hannifin	20.8	55.1 (750)	2.8 (588)	38.4 (718)
281	Kaiser Alum & Chem	20.7	140.7 (327)	–5.6 (779)	176.2 (382)
282	A C Nielsen	20.6	31.2 (799)	2.1 (637)	21.4 (795)
283	VF	20.5	42.9 (788)	4.5 (482)	22.2 (793)
284	NL Industries	20.3	109.0 (461)	9.3 (295)	112.5 (449)
285	Johnson Controls	20.3	61.8 (723)	2.7 (596)	42.5 (694)
286	Anheuser-Busch Cos	20.2	226.4 (170)	14.2 (180)	193.1 (373)
287	Duke Power	20.2	111.2 (450)	17.3 (148)	349.8 (333)
288	Super Valu Stores	20.0	259.6 (127)	3.4 (547)	42.8 (691)
289	Brunswick	20.0	53.4 (760)	9.6 (279)	39.4 (713)
290	Union Oil California	19.7	527.0 (37)	40.8 (33)	431.7 (299)
291	AMP	19.7	63.1 (720)	6.0 (423)	54.6 (639)
292	Knight-Ridder News	19.7	67.5 (686)	5.2 (460)	53.4 (646)
293	Chemical New York	19.6	281.0 (108)	12.3 (216)	2460.0 (28)
294	Ryder System	19.6	106.0 (477)	4.2 (497)	101.4 (467)
295	Scott Paper	19.5	117.9 (414)	3.8 (521)	122.5 (426)
296	Getty Oil	19.4	657.0 (26)	35.5 (39)	587.2 (241)
297	Kellogg	19.3	122.7 (394)	11.8 (228)	67.3 (567)
298	Continental Corp	19.2	182.6 (234)	5.5 (448)	448.9 (293)
299	Whirlpool	19.1	118.7 (411)	7.3 (369)	65.9 (577)
300	Mercantile Stores	19.0	75.2 (638)	3.7 (526)	41.1 (702)
301	Marsh & McLennan	18.9	48.8 (779)	6.4 (407)	44.2 (683)
302	Olin	18.9	96.5 (519)	2.8 (588)	86.6 (507)
303	Best Products	18.7	84.6 (590)	1.5 (673)	56.6 (628)
304	Central Soya	18.3	95.9 (522)	1.1 (698)	29.7 (759)
305	Timken	18.2	55.7 (745)	–0.2 (745)	55.7 (632)
306	EG&G	18.1	44.2 (785)	2.2 (629)	14.9 (807)
307	Intel	18.1	49.7 (777)	1.7 (663)	58.4 (618)
308	Alco Standard	17.9	159.3 (273)	3.4 (547)	51.5 (656)
309	Wells Fargo	17.8	184.8 (229)	7.8 (349)	1394.0 (71)
310	Petrolane	17.7	111.5 (447)	5.9 (432)	59.3 (610)
311	Wang Laboratories	17.7	65.5 (704)	6.1 (418)	67.1 (569)
312	Roadway Services	17.7	65.0 (709)	4.3 (490)	38.9 (714)
313	Air Prods & Chems	17.6	89.4 (565)	6.0 (423)	123.6 (424)
313	Anderson, Clayton	17.6	95.8 (523)	3.2 (564)	51.8 (654)
315	Hughes Tool	17.5	91.2 (553)	8.4 (325)	134.9 (414)
315	SCOA Industries	17.5	66.0 (697)	2.1 (637)	26.3 (774)
317	Koppers	17.3	91.5 (550)	–2.2 (761)	68.8 (562)
318	Whittaker	17.2	97.6 (515)	3.4 (547)	53.6 (645)
318	Commonwlth Edison	17.2	240.8 (155)	35.4 (40)	800.6 (191)
320	AMAX	17.1	141.6 (323)	–22.9 (798)	298.4 (349)
321	American Greetings	17.0	43.7 (786)	2.6 (601)	34.2 (744)
322	National Svc Inds	16.9	52.4 (765)	3.0 (577)	25.3 (779)
323	Consol Freightways	16.9	71.4 (664)	3.3 (560)	53.4 (646)
324	MCA	16.8	94.8 (533)	10.5 (255)	98.0 (476)
325	Foremost-McKesson	16.7	269.8 (116)	4.4 (486)	83.2 (514)
326	Black & Decker	16.4	71.0 (667)	–4.7 (778)	60.9 (602)
327	Texas Utilities	16.1	201.3 (204)	26.7 (85)	498.7 (274)
328	Mattel	16.0	83.9 (597)	2.6 (601)	47.3 (673)
328R	R Donnelley & Sons	16.0	87.8 (572)	5.7 (441)	60.5 (606)
330	Union Camp	16.0	95.7 (524)	7.8 (349)	128.2 (420)
331	Foster Wheeler	15.9	101.9 (497)	3.6 (536)	59.4 (609)
332	G D Searle	15.8	65.8 (701)	8.9 (303)	80.6 (525)
333	United States Gypsum	15.7	84.4 (591)	2.8 (588)	72.3 (551)
334	Polaroid	15.7	82.6 (601)	1.5 (673)	84.5 (512)
335	Stanley Works	15.5	61.9 (722)	2.4 (615)	40.9 (703)
336	Storage Technology	15.5	69.6 (676)	4.1 (508)	77.8 (540)
337	Crane	15.5	72.7 (654)	–0.2 (745)	55.4 (634)
338	Crocker National	15.3	189.1 (227)	4.7 (473)	1630.0 (56)
339	Northwest Bancorp	15.2	136.9 (341)	5.9 (432)	1156.9 (116)
340	So Calif Edison	15.2	283.4 (106)	36.6 (38)	669.0 (218)
341	Western Union	15.0	68.3 (683)	5.5 (448)	136.2 (413)
342	Stone & Webster	15.0	21.5 (805)	3.6 (536)	28.8 (764)
343	Beneficial Corp	14.9	136.9 (341)	–2.4 (763)	416.9 (308
343	Westvaco	14.9	97.3 (516)	4.2 (497)	90.1 (500
345	Giant Food	14.8	125.1 (378)	2.5 (610)	30.5 (754
346	Perkin-Elmer	14.8	70.3 (673)	4.2 (497)	59.0 (612
347	Evans Products	14.7	84.2 (594)	–4.4 (777)	64.5 (581
348	Sundstrand	14.6	65.9 (699)	4.7 (473)	61.3 (600
349	Auto Data Processing	14.5	46.0 (784)	4.0 (510)	38.2 (720
350	Pittston	14.5	166.5 (262)	–0.8 (751)	96.5 (479
351	Republic Airlines	14.5	105.5 (481)	–2.7 (765)	81.7 (521
352	Waste Management	14.3	67.8 (685)	7.5 (362)	82.1 (519
352	Ethyl	14.3	129.5 (363)	6.6 (400)	145.6 (406
354	McGraw-Hill	14.2	83.9 (597)	7.7 (354)	66.5 (573
355	Kemper	14.1	140.8 (326)	5.3 (456)	437.9 (296
355	Ex-Cell-O	14.1	72.8 (653)	3.4 (547)	49.5 (666
357	Thrifty Corp	14.0	80.4 (616)	1.3 (688)	27.9 (768
357	Raymond Intl	14.0	117.0 (419)	0.9 (715)	35.5 (734
357	Universal Leaf	14.0	89.5 (564)	2.4 (615)	30.0 (756
360	So New England Tel	14.0	77.5 (628)	6.6 (400)	141.0 (410
361	Texas Air	13.8	109.9 (457)	–3.5 (768)	86.4 (508
362	Crown Cork & Seal	13.8	98.1 (511)	3.2 (564)	61.0 (601
363	Rite Aid	13.8	94.0 (537)	4.0 (510)	33.2 (746
364	Louisiana-Pacific	13.8	63.4 (717)	–1.2 (756)	90.3 (498
365	Amer Broadcasting	13.7	192.8 (220)	11.7 (233)	140.3 (411
366	Middle South Utils	13.6	213.7 (183)	22.9 (99)	763.3 (197
367	Tiger International	13.6	106.5 (473)	–10.0 (789)	180.8 (380
368	Centel	13.6	85.2 (584)	8.0 (341)	162.1 (39

THE ENERGY COMPANY THAT ISN'T RUNNING OUT OF ENERGY.

Business

HNG subsidiary a partner in offshore natural gas line

HNG Offshore Co., a newly created subsidiary of Houston Natural Gas Corp., will be the third partner in the first segment of the Seagull Shoreline System, along with Seagull

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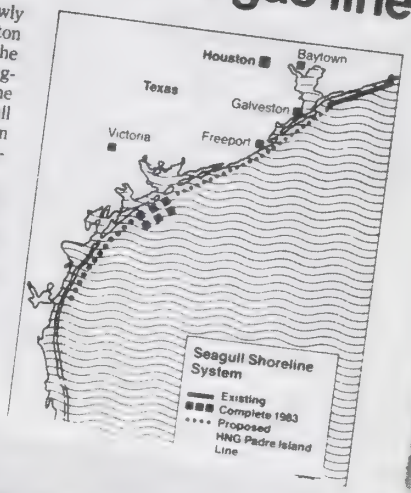

HNG chief sees clear sailing beyond storm

Houston Natural Gas Corp.'s chief executive said t
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Houston Natural Gas Unit Joins Seagull's Pipeline Partnership

HOUSTON—Seagull Pipeline Corp. said a Houston Natural Gas Corp. unit joined the Seagull Pipeline Shoreline System partnership.

The Houston Natural Gas unit, HNG Offshore Co., owns 25% of the initial 50-mile phase of Seagull's planned 2
pipeline along the Texas coast. S
operator of the project, own
through its Seagull Transmissi
unit. InterNorth Inc.'s Northern
state Pipeline Co. unit owns the r
ing 50% of the first phase.

Previously the project was cal
Seagull Offshore System. The
phase will cost $50 million and has
jected capacity of 200 million cubic
natural gas a day. The segment w
24-inch, two-phase pipeline begin
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HNG will be ready regardless of how pipeline regulations go

Houston Natural Gas Corp. will be ready regardless of how pipeline regulations might
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Matthews pointed out that HNG's pipeline companies cannot be joined together to form a single, dedicated system because of federal regulations.

Matthews said that the proximity of the HPL and Llano systems would assist the company in making transportation agreements.

If the Federal Energy Regulatory Commission or Congress change the regulations and laws to give intrastate pipelines the same opportunities and rights as interstate lines, the three Houston Natural pipeline subsidiaries could be in an excellent position to determine how, when, where and at what price a lot of natural gas in the United States would flow.

Cuts fuel costs $10 million

HL&P, Houston Pipe sign 5-year natural gas pact

Houston Lighting & Power Co. has signed a five-year natural gas purchase contract with Houston Pipe Line Co., a subsidiary of Houston Natural Gas Corp., that calls for Houston Pipe Line to deliver approximately 300 million cubic feet of gas a day, or 90 billion cubic feet a year, to HL&P's nine gas-fired electric generating plants in the Houston area.

HL&P said that the agreement will save its customers up to $10 million a year in fuel costs and provide approximately one-fourth of the company's daily natural gas requirements.

The initial sales price will be $4.12 per million British thermal units. According to the terms of the contract, the price will be based on the pipeline's weighted average cost of gas purchases plus the average of its transportation
other costs. It can

Houston Natural Gas hikes dividend again

Houston Natural Gas Corp. has increased the cash dividend on its common stock to 45½ cents per share, from 42½ cents — the 12th consecutive year in which the dividend has been increased.

The first quarterly dividend at the higher rate will be paid April 1, to stockholders of record March 14.

HNG is a worldwide, energy-related company involved in natural gas transmission, oil and gas exploration and production, marine transportation services and construction, industrial gases and coal mining. For a copy of the 1982 HNG Annual Report, write our Chairman, M. D. Matthews, P.O. Box 1188, Houston, Texas 77001.

HNG

HOUSTON NATURAL GAS

Ranking The Forbes 500s—Jobs And Productivity

Rank	Company	Employees (000)	Per employee ($000) Sales (rank)	Profits (rank)	Assets (rank)
369	Northwest Airlines	13.4	139.9 (330)	0.4 (732)	102.6 (466)
370	First Natl Supermkts	13.3	90.7 (555)	0.4 (732)	15.2 (805)
371	Hershey Foods	13.0	120.2 (404)	7.2 (373)	68.2 (564)
372	Federal Co	13.0	88.5 (569)	1.4 (681)	23.9 (786)
372	Fischbach	13.0	97.8 (513)	2.0 (646)	35.8 (729)
374	Pub Svc Elec & Gas	13.0	299.1 (92)	26.5 (88)	610.6 (236)
375	Dover	12.9	80.5 (615)	7.0 (380)	47.6 (671)
376	Consumers Power	12.8	212.8 (184)	21.9 (106)	591.7 (240)
377	Continental Illinois	12.8	460.1 (49)	6.1 (418)	3345.8 (16)
378	Bank of Boston	12.8	214.5 (180)	9.7 (277)	1427.1 (68)
379	Varian Associates	12.7	54.4 (756)	2.1 (637)	41.3 (701)
380	Lincoln National	12.7	263.0 (120)	9.6 (279)	784.4 (192)
381	Baldwin-United	12.7	284.4 (102)	3.7 (526)	663.8 (220)
382	E F Hutton Group	12.6	126.5 (373)	6.4 (407)	583.6 (246)
383	Dravo	12.6	91.5 (550)	–0.9 (754)	50.9 (661)
384	Rohm & Haas	12.5	146.2 (312)	6.8 (391)	109.2 (454)
385	General Cinema	12.5	70.9 (669)	3.8 (521)	47.5 (672)
386	J P Morgan	12.4	555.8 (34)	31.8 (55)	4730.5 (8)
387	Hammermill Paper	12.3	113.2 (437)	2.5 (610)	80.6 (525)
388	Florida Power & Lt	12.3	238.6 (157)	21.6 (110)	555.9 (254)
389	General Public Utils	12.2	196.8 (211)	2.8 (588)	423.8 (304)
390	Diamond Shamrock	12.2	260.2 (125)	12.2 (219)	261.5 (358)
391	Genuine Parts	12.2	158.7 (276)	8.2 (333)	64.2 (582)
391	Gt Northern Nekoosa	12.2	117.2 (418)	6.4 (407)	121.5 (431)
393	Va Electric & Power	12.2	194.3 (217)	22.9 (99)	605.6 (238)
393	Phelps Dodge	12.2	78.8 (621)	–6.1 (781)	165.7 (387)
395	Bankers Trust NY	12.2	384.9 (66)	18.4 (136)	3326.8 (17)
396	Columbia Gas System	12.1	418.5 (58)	15.2 (167)	425.5 (302)
397	Cincinnati Milacron	12.0	63.4 (717)	1.0 (705)	55.2 (635)
398	E-Systems	12.0	63.1 (720)	3.0 (577)	26.4 (773)
399	Joy Manufacturing	11.9	90.5 (558)	7.0 (380)	71.0 (556)
400	Farmers Group	11.9	53.3 (761)	10.7 (252)	151.7 (399)
401	Browning-Ferris Inds	11.8	60.6 (729)	5.3 (456)	56.5 (629)
401	Houston Natural Gas	11.8	269.6 (117)	22.3 (103)	223.3 (365)
403	Am Natural Resources	11.6	266.2 (118)	13.8 (186)	342.1 (337)
404	Electronic Data Sys	11.6	43.3 (787)	4.0 (510)	28.4 (765)
405	ConAgra	11.6	146.6 (308)	2.8 (588)	42.0 (699)
406	Stauffer Chemical	11.6	139.6 (332)	10.7 (252)	188.8 (375)
407	National Distillers	11.4	131.1 (357)	6.9 (387)	149.4 (401)
408	First Chicago	11.2	392.6 (64)	12.2 (219)	3199.8 (19)
409	Detroit Edison	11.2	189.5 (225)	22.7 (101)	681.4 (215)
410	Newmont Mining	11.2	63.5 (715)	4.3 (490)	173.8 (384)
411	American General	11.2	260.6 (124)	18.1 (138)	1187.4 (108)
412	Smith International	11.2	96.0 (520)	7.4 (364)	104.1 (464)
413	Cameron Iron Works	11.1	102.9 (490)	13.7 (187)	119.3 (436)
414	Bally Manufacturing	11.0	113.8 (432)	8.3 (328)	92.1 (492)
415	Marine Midland Bks	11.0	219.0 (179)	7.9 (345)	1837.0 (48)
416	CBI Industries	11.0	110.0 (455)	8.0 (341)	89.0 (502)
417	USAir Group	10.9	116.7 (420)	5.4 (452)	97.4 (477)
418	Richardson-Vicks	10.9	102.3 (493)	6.1 (418)	71.4 (553)
418	ASARCO	10.9	123.9 (388)	–3.6 (769)	197.5 (370)
418	Toys "R" Us	10.9	95.6 (525)	5.9 (432)	51.3 (657)
421	InterNorth	10.8	384.1 (67)	12.5 (211)	365.2 (325)
422	National Can	10.7	144.7 (315)	3.2 (564)	73.7 (546)
423	Limited	10.5	68.7 (679)	3.2 (564)	30.5 (754)
424	Kerr-McGee	10.5	361.2 (74)	20.1 (124)	359.9 (329)
425	Fleming Cos	10.2	361.0 (75)	2.9 (581)	58.5 (616)
426	Safeco	10.2	145.9 (313)	10.5 (255)	293.4 (351)
427	Houston Industries	10.1	378.6 (68)	12.4 (213)	559.4 (250)
428	Niagara Mohawk Pwr	10.1	236.7 (161)	26.6 (87)	468.3 (289)
429	Phila Electric	10.1	261.7 (121)	33.3 (48)	708.4 (209)
430	Masco	10.1	84.7 (589)	7.7 (354)	121.0 (433)
431	Federal Express	10.1	79.7 (618)	7.8 (349)	72.4 (550)
432	Pacific Lighting	10.0	435.2 (54)	12.9 (201)	325.2 (340)
433	First Bank System	10.0	196.1 (213)	11.5 (239)	1689.3 (53)
434	Rollins	10.0	52.6 (764)	4.6 (476)	40.0 (706)
435	Advncd Micro Devcs	9.9	28.4 (801)	0.9 (715)	24.6 (783)
436	Paine Webber	9.9	111.6 (446)	3.6 (536)	435.8 (297)
437	Texas Gas	9.8	293.5 (95)	11.6 (237)	186.4 (376)
438	Deluxe Check Printers	9.8	56.1 (742)	6.6 (400)	35.7 (731)
439	Irving Bank	9.7	235.9 (162)	8.4 (325)	2022.2 (40)
440	St Paul Cos	9.6	224.7 (173)	21.2 (113)	553.5 (255)
441	Pennzoil	9.5	238.0 (159)	19.8 (126)	338.5 (338)
442	Intl Minerals & Chem	9.5	164.3 (266)	14.5 (176)	204.4 (369)
443	Parsons	9.2	131.6 (355)	4.6 (476)	57.5 (625
444	Pneumo	9.2	124.2 (386)	2.6 (601)	43.1 (689
445	Pacific Pwr & Lt	9.2	152.9 (296)	21.5 (111)	479.8 (285
446	Wilson Foods	9.1	245.3 (147)	1.4 (681)	31.3 (752
447	Eastern Gas & Fuel	9.1	146.5 (311)	7.3 (369)	148.6 (403
448	Potlatch	9.0	90.7 (555)	2.5 (610)	130.0 (416
449	Baltimore Gas & Elec	9.0	176.9 (245)	19.4 (131)	389.6 (316
450	USF&G	9.0	256.6 (133)	12.7 (206)	565.1 (248
451	Alxndr & Alxndr	9.0	64.1 (713)	1.6 (666)	162.7 (390
452	Amerada Hess	8.9	938.7 (14)	19.0 (134)	691.5 (211
453	Central & South West	8.8	272.6 (113)	29.6 (67)	585.8 (244
454	PACCAR	8.8	140.4 (329)	4.3 (490)	92.1 (492
455	Service Merchandise	8.7	136.9 (341)	3.6 (536)	67.1 (569
456	GATX	8.7	109.4 (460)	3.2 (564)	314.7 (342
457	Amstar	8.7	164.1 (267)	4.6 (476)	76.9 (542
458	InterFirst	8.5	283.6 (104)	24.3 (95)	2468.4 (26
459	Northeast Utilities	8.4	209.4 (189)	18.0 (140)	478.4 (286
460	Gelco	8.4	114.5 (429)	3.5 (543)	283.0 (353
461	M/A-Com	8.3	70.9 (669)	3.7 (526)	68.3 (563
462	First City Bancorp	8.3	208.6 (193)	14.5 (176)	1998.9 (42
463	Bank of New York	8.3	183.9 (231)	8.8 (306)	1536.1 (60
464	El Paso	8.2	532.2 (36)	6.5 (405)	509.7 (270
464	Willamette Inds	8.2	113.3 (436)	0.7 (724)	117.8 (440
466	Barnett Banks Fla	8.2	96.7 (518)	6.9 (387)	847.1 (18
467	Capital Holding	8.2	157.8 (279)	13.1 (195)	498.6 (275
468	Penn Power & Light	8.1	150.5 (300)	34.4 (45)	682.5 (21
469	New York Times	8.1	115.3 (426)	6.7 (394)	94.0 (48
469	Raychem	8.1	66.0 (697)	4.6 (476)	55.8 (63
471	Witco Chemical	8.1	162.2 (269)	3.7 (526)	82.2 (51
472	Avnet	8.0	139.0 (336)	8.8 (306)	77.9 (53
473	Engelhard	7.9	256.0 (135)	8.2 (333)	98.3 (47
474	American Natl Ins	7.9	92.1 (545)	8.8 (306)	410.0 (31
475	Longs Drug Stores	7.9	143.1 (319)	3.9 (516)	36.6 (72
476	Intl Multifoods	7.8	146.6 (308)	4.2 (497)	61.4 (59
477	Ohio Edison	7.8	183.8 (232)	25.1 (93)	674.7 (21
478	Seafirst	7.8	179.9 (238)	–11.8 (792)	1290.2 (8

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Ranking The Forbes 500s—Jobs And Productivity

Rank	Company	Employees (000)	Per employee ($000) Sales (rank)	Profits (rank)	Assets (rank)
479	Mellon National	7.8	303.2 (85)	17.3 (148)	2612.6 (23)
480	Carolina Pwr & Lt	7.8	198.2 (210)	29.3 (68)	637.8 (228)
481	Chubb	7.8	194.7 (215)	9.6 (279)	413.3 (310)
482	Malone & Hyde	7.7	283.9 (103)	3.6 (536)	53.3 (649)
483	Archer Danls Midland	7.7	484.0 (43)	20.2 (121)	286.1 (352)
484	Texas Commerce Bshs	7.7	234.5 (166)	22.2 (104)	2376.3 (29)
485	RepublicBank	7.6	254.1 (137)	18.9 (135)	2263.2 (36)
486	Michigan National	7.6	103.8 (487)	0.5 (729)	855.8 (180)
486	Cabot	7.6	208.9 (192)	11.6 (237)	173.6 (385)
488	Food Town Stores	7.6	125.1 (378)	2.9 (581)	28.1 (766)
489	Panhandle Eastern	7.6	449.2 (50)	29.1 (69)	670.3 (217)
490	Consol Natural Gas	7.5	426.7 (55)	21.2 (113)	434.7 (298)
491	No States Power	7.4	209.5 (188)	21.2 (113)	429.2 (300)
492	George A Hormel	7.4	192.8 (220)	3.8 (521)	66.1 (574)
493	SONAT	7.4	362.2 (73)	27.7 (78)	424.3 (303)
494	Union Electric	7.2	168.5 (256)	28.4 (74)	640.9 (227)
495	Captl Cities Cmmn	7.2	92.7 (542)	13.5 (190)	108.5 (457)
496	Morton Thiokol	7.1	110.8 (453)	19.2 (132)	105.2 (461)
497	Valley National	7.0	114.7 (428)	7.2 (373)	1020.8 (149)
498	Phibro-Salomon	6.9	3898.2 (3)	49.2 (17)	5791.1 (5)
499	NBD Bancorp	6.8	205.7 (199)	11.9 (226)	1814.1 (49)
500	Superior Oil	6.8	300.6 (87)	32.9 (51)	735.6 (201)
501	Southeast Banking	6.8	125.6 (376)	7.8 (349)	1074.7 (133)
502	Flickinger	6.7	198.6 (209)	1.5 (673)	27.1 (770)
503	MAPCO	6.6	300.0 (90)	11.1 (245)	259.4 (359)
504	Arizona Public Serv	6.6	160.3 (272)	34.8 (44)	585.7 (245)
505	No Indiana Pub Svc	6.6	261.7 (121)	10.4 (261)	521.1 (267)
506	Public Service Colo	6.6	240.6 (156)	17.6 (144)	389.6 (316)
507	Sysco	6.6	259.6 (127)	5.2 (460)	66.0 (575)
508	Williams Cos	6.6	257.9 (130)	5.2 (460)	361.3 (326)
509	Lowe's Companies	6.5	158.6 (277)	3.9 (516)	60.3 (607)
510	Coastal Corp	6.5	892.2 (17)	10.1 (266)	496.3 (278)
510	Waldbaum	6.5	229.4 (169)	2.6 (601)	42.0 (699)
512	Western Co No Amer	6.4	107.5 (469)	8.8 (306)	196.4 (371)
513	NCNB	6.4	167.6 (259)	11.9 (226)	1805.9 (50)
514	Cox Communications	6.4	80.4 (616)	10.2 (265)	125.0 (422)
515	Wachovia	6.3	129.4 (365)	8.5 (323)	1105.2 (128)
516	Diebold	6.2	68.6 (680)	6.7 (394)	42.5 (694)
517	Wisconsin Elec Pwr	6.2	211.3 (186)	21.4 (112)	381.9 (321)
517	Torchmark	6.2	153.7 (294)	12.2 (219)	492.5 (280)
519	Texas Eastern	6.2	919.4 (15)	26.2 (89)	738.5 (200)
520	PNC Financial	6.1	214.5 (180)	17.2 (152)	1905.3 (44)
521	Washington National	6.1	150.1 (301)	4.0 (510)	540.2 (261)
521	Mercantile Texas	6.1	187.5 (228)	16.7 (153)	1673.2 (54)
523	Swift Independent	6.0	411.9 (60)	4.2 (497)	42.8 (691)
524	Jefferson-Pilot	6.0	153.9 (291)	14.4 (178)	521.7 (266)
525	Payless Cashways	5.9	102.1 (495)	3.9 (516)	44.6 (681)
526	Long Island Lighting	5.9	277.1 (110)	52.5 (15)	907.5 (173)
527	BancOhio	5.9	112.4 (442)	3.8 (521)	990.0 (159)
528	Vulcan Materials	5.9	123.0 (391)	9.3 (295)	121.4 (432)
529	Big Three Industries	5.8	131.8 (354)	14.9 (170)	181.1 (379)
529	Allegheny Power	5.8	300.6 (87)	27.6 (79)	587.1 (242)
531	Parker Drilling	5.8	105.8 (478)	13.1 (195)	159.5 (396)
532	NICOR	5.8	373.3 (69)	15.0 (168)	453.0 (292)
533	W W Grainger	5.7	140.7 (327)	8.8 (306)	91.1 (496)
534	G Heileman Brewing	5.7	152.8 (297)	8.0 (341)	88.1 (505)
535	SEDCO	5.7	92.5 (543)	46.0 (21)	160.0 (394)
536	Dow Jones	5.6	129.5 (363)	15.6 (160)	105.4 (460)
537	Citizens & Sthrn Ga	5.6	113.4 (435)	8.9 (303)	1071.1 (136)
538	A H Robins	5.6	86.9 (576)	8.8 (306)	79.3 (531)
539	U S Bancorp	5.5	124.7 (381)	9.4 (291)	1040.2 (144)
540	Murphy Oil	5.4	478.6 (46)	29.0 (71)	549.7 (258)
541	Shawmut	5.4	113.0 (438)	6.0 (423)	990.2 (158)
542	Kaneb Services	5.4	109.9 (457)	11.8 (228)	162.0 (392)
543	Charter	5.4	1122.5 (9)	2.1 (637)	982.8 (160)
544	Clorox	5.4	160.6 (271)	8.4 (325)	99.9 (470)
545	Potomac Elec Power	5.4	203.2 (202)	22.1 (105)	502.6 (273)
546	Servicemaster Inds	5.4	111.1 (451)	4.0 (510)	15.2 (805)
547	Washington Post	5.4	149.7 (304)	9.8 (275)	93.7 (488)
548	Commerce Clearing	5.3	65.5 (704)	5.9 (432)	51.0 (659)
549	Sun Banks of Florida	5.3	99.1 (508)	6.4 (407)	938.2 (167)
550	Rainier Bancorp	5.3	137.5 (340)	7.4 (364)	1102.2 (129)
551	Ohio Casualty	5.3	167.7 (258)	10.8 (248)	296.9 (350)
551	Cleveland Elec Illum	5.3	209.2 (191)	39.4 (34)	725.1 (206)
553	Zapata	5.3	101.7 (498)	18.1 (138)	221.3 (366)
554	Public Service Ind	5.2	154.6 (289)	44.5 (22)	728.3 (204)
555	Arkla	5.2	250.3 (142)	18.4 (136)	305.2 (347)
556	New England Electric	5.2	235.4 (164)	21.0 (117)	475.8 (287)
557	Freeport-McMoran	5.1	146.6 (308)	12.9 (201)	325.0 (341)
557	Cincinnati G & E	5.1	247.2 (145)	25.6 (91)	536.8 (264)
559	Natomas	5.1	318.3 (80)	8.7 (314)	557.7 (252)
560	Combined Internatl	5.0	208.6 (193)	17.3 (148)	490.2 (281)
561	Entex	5.0	292.7 (96)	9.5 (288)	610.4 (237
561	Nash Finch	5.0	223.5 (175)	2.3 (624)	35.7 (731
563	San Diego Gas & Elec	5.0	286.4 (101)	31.5 (57)	482.6 (282
564	Prime Computer	5.0	87.6 (574)	9.0 (300)	75.6 (544
565	ROLM	4.9	76.9 (631)	6.0 (423)	54.0 (642
566	Maryland National	4.9	111.1 (451)	8.3 (328)	1032.7 (146
567	Walter E Heller Intl	4.9	181.7 (235)	3.4 (547)	1362.7 (81
568	Farm House Foods	4.9	300.3 (89)	0.8 (720)	56.1 (630
569	Philadelphia Natl	4.9	158.5 (278)	11.7 (233)	1296.8 (88
570	Midcon	4.8	688.4 (23)	27.4 (81)	544.4 (259
571	Coloardo Natl Bnkshs	4.8	54.0 (757)	4.4 (486)	496.6 (277
572	First Union	4.8	138.2 (337)	9.0 (300)	1285.0 (91
573	Duquesne Light	4.8	156.1 (284)	22.4 (102)	603.0 (239
574	United Virginia Bshs	4.8	109.8 (459)	8.6 (319)	1015.0 (151
575	BayBanks	4.7	92.2 (544)	7.0 (380)	781.8 (193
576	H F Ahmanson	4.7	425.1 (57)	-9.4 (787)	3557.8 (15
577	Medtronic	4.7	71.0 (667)	10.0 (268)	79.3 (531
578	Gulf States Utils	4.7	277.8 (109)	35.3 (41)	809.0 (189
579	Florida Progress	4.7	259.3 (129)	17.5 (145)	622.7 (232
580	Nalco Chemical	4.7	137.9 (338)	12.4 (213)	99.5 (472
581	Virginia Natl Bshs	4.7	95.4 (527)	6.7 (394)	831.9 (185
582	Comerica	4.6	162.6 (268)	7.7 (354)	1596.4 (58
583	Wetterau	4.6	426.6 (56)	0.4 (732)	71.3 (554
584	Alleghany	4.6	295.7 (93)	12.7 (206)	964.7 (161
585	First Security	4.5	118.2 (412)	11.8 (228)	1024.4 (147
586	Trust Co of Georgia	4.5	108.1 (467)	11.8 (228)	1012.2 (153
587	Utah Power & Light	4.4	176.0 (248)	30.0 (64)	615.9 (235
588	Banc One	4.4	136.3 (344)	13.0 (199)	1132.4 (120

This announcement is neither an offer to sell nor a solicitation of an offer to buy any of these securities. The offer is made only by the Prospectus.

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Ranking The Forbes 500s—Jobs And Productivity

Rank	Company	Employees (000)	Per employee ($000) Sales (rank)	Profits (rank)	Assets (rank)
589	Primark	4.4	370.6 (70)	4.1 (508)	305.6 (346)
590	A E Staley Mfg	4.4	363.6 (71)	14.3 (179)	261.8 (357)
591	N Y State Elec & Gas	4.4	203.6 (201)	33.2 (50)	618.8 (234)
592	Southwest Bancshares	4.3	178.3 (244)	15.4 (164)	1598.9 (57)
593	First Wisconsin	4.3	134.2 (351)	6.8 (391)	1133.1 (119)
594	Lubrizol	4.3	190.9 (223)	11.2 (242)	151.3 (400)
595	AmeriTrust	4.2	147.0 (306)	14.6 (174)	1356.3 (82)
596	First of America Bnk	4.2	104.5 (485)	4.9 (469)	901.6 (176)
597	Fort Howard Paper	4.2	126.9 (372)	21.8 (107)	152.3 (398)
598	Bank of New England	4.1	155.2 (285)	8.6 (319)	1224.4 (100)
599	Northern Trust	4.1	201.8 (203)	7.9 (345)	1526.9 (61)
600	Utd Energy Resources	4.1	1371.9 (5)	44.1 (23)	721.8 (207)
601	Provident Life & Acc	4.0	263.5 (119)	16.6 (154)	665.6 (219)
602	Illinois Power	4.0	276.1 (111)	39.0 (35)	771.6 (195)
603	Tidewater	4.0	116.6 (421)	17.9 (141)	163.5 (389)
603	USLIFE	4.0	224.9 (172)	19.7 (129)	805.1 (190)
605	GEICO	4.0	205.9 (198)	19.5 (130)	394.3 (314)
606	Computervision	4.0	82.1 (602)	8.2 (333)	69.2 (559)
607	First Atlanta	3.9	122.3 (396)	9.8 (275)	1146.7 (117)
608	Boston Edison	3.9	272.6 (113)	15.6 (160)	498.0 (276)
609	Manufacturers Natl	3.9	157.2 (280)	5.9 (432)	1368.6 (78)
610	Metromedia	3.8	106.1 (475)	80.6 (5)	270.9 (356)
611	Flagship Banks	3.8	90.5 (558)	6.4 (407)	809.4 (188)
612	Harris Bankcorp	3.8	241.1 (154)	9.4 (291)	1874.7 (45)
613	CBT	3.8	120.9 (398)	8.2 (333)	1333.1 (84)
614	Huntington Bancshs	3.8	115.4 (424)	7.7 (354)	1380.2 (75)
614	Wyman-Gordon	3.8	124.5 (383)	14.8 (172)	99.7 (471)
616	California First Bnk	3.8	130.0 (362)	2.6 (601)	1095.8 (130)
617	Florida Natl Banks	3.8	90.3 (561)	5.6 (446)	924.1 (170)
618	First Natl State Bcp	3.8	122.8 (392)	9.2 (298)	1286.4 (90)
619	Gulf United	3.8	319.3 (79)	25.3 (92)	866.3 (179)
619	Peoples Energy	3.8	411.3 (61)	12.3 (216)	311.1 (343)
621	First Pennsylvania	3.7	170.4 (253)	–7.2 (784)	1454.6 (65)
622	Oklahoma Gas & Elec	3.7	243.1 (149)	28.1 (76)	539.3 (263)
623	Fleet Financial	3.7	146.8 (307)	10.5 (255)	1217.9 (102)
624	Donaldson, Lufkin	3.7	169.0 (255)	4.9 (469)	1431.8 (67)
625	Mitchell Energy & Dev	3.7	259.9 (126)	21.7 (108)	506.7 (272)
625	National City	3.7	178.8 (242)	11.8 (228)	1844.2 (47)
627	Centerre Bancorp	3.7	166.9 (261)	6.3 (414)	1385.6 (73)
628	Midlantic Banks	3.7	125.7 (375)	10.5 (255)	1174.2 (112)
629	Hartford National	3.7	106.7 (472)	6.7 (394)	1130.6 (121)
630	State Street Boston	3.7	128.6 (367)	13.4 (192)	1072.6 (135)
631	Brooklyn Union Gas	3.6	242.1 (153)	12.6 (209)	233.4 (363)
632	AmSouth Bancorp	3.6	103.6 (488)	8.8 (306)	902.5 (175)
633	Tesoro Petroleum	3.6	677.7 (24)	13.9 (184)	233.4 (363)
633	Tandem Computers	3.6	86.7 (577)	8.3 (328)	93.7 (488)
635	Intl Flavors & Frag	3.6	124.4 (385)	17.5 (145)	119.9 (435)
636	Dayton Power & Light	3.6	248.1 (144)	31.4 (58)	564.4 (249)
637	So Carolina E & G	3.5	242.7 (150)	27.2 (83)	619.9 (233)
638	Banco Popular PR	3.5	93.5 (539)	7.8 (349)	781.8 (193)
639	Mercantile Bancorp	3.5	172.9 (250)	12.0 (223)	1633.1 (55)
640	Allied Bancshares	3.5	207.9 (196)	23.8 (97)	1740.2 (51)
641	First & Merchants	3.4	102.5 (491)	7.4 (364)	828.2 (186)
642	Texas Oil & Gas	3.4	558.9 (33)	73.5 (7)	732.8 (202)
642	First Alabama Bshs	3.4	104.4 (486)	9.9 (270)	929.5 (169)
644	First Maryland Bncp	3.3	120.3 (402)	7.2 (373)	1040.8 (142
645	Pall	3.3	59.2 (735)	7.6 (359)	60.6 (605
646	United Banks of Colo	3.2	127.7 (368)	6.6 (400)	1084.4 (131
647	First Tennessee Natl	3.2	120.6 (400)	8.3 (328)	1045.0 (140
648	Lincoln First Banks	3.2	137.6 (339)	7.4 (364)	1200.1 (105
649	Portland Genl Elec	3.2	176.5 (246)	46.3 (20)	716.5 (208
650	Tele-Communications	3.2	87.2 (575)	3.2 (564)	282.8 (354
651	Norstar Bancorp	3.2	118.9 (410)	13.7 (187)	1128.2 (122
652	BanCal Tri-State	3.2	160.9 (270)	2.7 (596)	1186.1 (110
653	Transco Energy	3.2	1203.1 (8)	42.6 (29)	1202.2 (104
654	U S Tobacco	3.2	100.5 (500)	17.3 (148)	104.3 (463
655	Comsat	3.2	129.0 (366)	13.6 (189)	256.1 (360
656	Gt Western Financial	3.2	437.6 (51)	–23.6 (799)	3998.4 (12
657	NIKE	3.2	220.2 (178)	15.6 (160)	119.2 (437
658	Third National	3.1	119.2 (409)	8.6 (319)	996.7 (157
659	First Virginia Banks	3.1	78.6 (624)	8.0 (341)	642.3 (226
660	Tosco	3.1	1105.6 (10)	38.6 (36)	414.1 (309
660	Public Service N M	3.1	136.1 (346)	36.9 (37)	684.7 (213
662	Dominion Bankshares	3.1	119.7 (406)	5.7 (441)	1037.2 (145
663	Premier Industrial	3.1	107.2 (470)	11.2 (242)	66.8 (571
664	Pioneer	3.1	362.3 (72)	19.9 (125)	345.4 (335
665	Texas American Bshs	3.1	179.3 (240)	13.9 (184)	1539.0 (59
666	Society	3.1	154.3 (290)	8.8 (306)	1281.4 (94
667	Colonial Penn Group	3.1	405.3 (62)	9.6 (279)	345.1 (336
668	Northwestern Finl	3.0	93.7 (538)	3.0 (577)	703.2 (210
669	Atlantic Bancorp	3.0	100.2 (503)	7.1 (377)	847.7 (182
670	Key Banks	3.0	98.2 (510)	8.7 (314)	935.0 (161
671	Commerce Bancshrs	3.0	120.5 (401)	10.5 (255)	1118.8 (125
672	Apple Computer	2.9	199.4 (207)	21.0 (117)	122.4 (427
673	United Jersey Banks	2.9	114.2 (431)	6.3 (414)	1115.3 (126
674	Bank of Virginia	2.9	142.6 (322)	7.5 (362)	1160.3 (115
675	TECO Energy	2.9	207.7 (197)	16.6 (154)	495.9 (279
676	Central Ill Pub Svc	2.9	204.4 (200)	23.1 (98)	511.4 (269
677	Fidelity Union Bncp	2.9	113.7 (433)	0.6 (725)	1187.3 (109
678	Fidelcor	2.9	155.1 (286)	9.9 (270)	1438.4 (6
679	Northwest Energy	2.8	562.8 (31)	13.4 (192)	848.0 (18
680	South Carolina Natl	2.8	86.3 (580)	5.9 (432)	731.3 (20
681	IntraWest Financial	2.8	142.9 (320)	–4.3 (775)	1183.2 (11
682	Rochester Gas & Elec	2.8	244.4 (148)	25.1 (93)	472.8 (28
683	Central Bancorp	2.8	108.2 (466)	7.6 (359)	1020.2 (15
684	Bancorp Hawaii	2.8	130.7 (359)	10.8 (248)	1073.8 (13
685	Oneok	2.8	404.7 (63)	20.3 (120)	361.1 (32
686	Mountain Fuel Supply	2.8	184.8 (229)	17.5 (145)	307.5 (34
687	Marshall & Ilsley	2.7	117.9 (414)	9.6 (279)	1044.6 (14
688	Montana Power	2.7	183.5 (233)	26.0 (90)	559.4 (25
689	Kansas City Pwr & Lt	2.7	179.4 (239)	29.9 (65)	662.1 (22
690	Equitable Bancorp	2.7	105.5 (481)	4.2 (497)	913.6 (17
691	First Kentucky Natl	2.7	120.7 (399)	9.6 (279)	1064.6 (13
692	Delmarva Power & Lt	2.7	238.4 (158)	27.5 (80)	550.9 (25
693	Global Marine	2.7	172.0 (252)	32.1 (54)	507.5 (27
693	Central Fidelity Bks	2.7	104.6 (484)	7.0 (380)	955.8 (16
693	Tampax	2.7	108.5 (463)	16.3 (157)	77.9 (53
696	American Petrofina	2.6	849.4 (18)	20.6 (119)	441.7 (29
697	Brown-Forman Dist	2.6	222.2 (177)	33.3 (48)	221.0 (36
698	Homestake Mining	2.6	67.0 (690)	6.7 (394)	148.9 (40

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Rank	Company	Employees (000)	Per employee ($000) Sales (rank)	Profits (rank)	Assets (rank)
699	MCI Communications	2.5	199.0 (208)	34.0 (46)	338.2 (339)
700	Southwest Airlines	2.5	131.4 (356)	13.5 (190)	166.8 (386)
701	Turner Construction	2.5	894.0 (16)	4.3 (490)	190.6 (374)
702	First Florida Banks	2.5	110.0 (455)	10.3 (264)	1013.3 (152)
703	Centran	2.5	134.0 (352)	–23.9 (800)	1122.6 (124)
704	Reading & Bates	2.5	210.9 (187)	29.9 (65)	466.0 (290)
705	Louisiana Land	2.4	483.6 (44)	31.2 (60)	688.2 (212)
706	American Fletcher	2.4	143.3 (318)	7.4 (364)	1251.4 (97)
707	Republic New York	2.4	515.2 (39)	29.1 (69)	3826.9 (14)
708	Puget Sound Pwr & Lt	2.4	193.8 (219)	41.1 (32)	809.7 (187)
709	Toledo Edison	2.4	201.0 (205)	44.0 (24)	885.2 (177)
710	Wisconsin Pwr & Lt	2.4	214.1 (182)	19.8 (126)	388.4 (318)
711	SouthTrust	2.4	119.6 (407)	9.6 (279)	1023.2 (148)
712	General Re	2.4	631.1 (28)	87.1 (4)	1998.0 (43)
713	Pioneer Hi-Bred Intl	2.4	235.0 (165)	30.2 (62)	216.2 (368)
714	Southwestern Pub Svc	2.3	253.7 (138)	32.9 (51)	533.7 (265)
715	Equimark	2.3	156.9 (282)	2.8 (588)	1387.0 (72)
716	First Charter Finl	2.3	436.4 (52)	–26.4 (801)	4058.6 (11)
717	Cullen/Frost Bankers	2.3	153.8 (293)	11.4 (240)	1312.3 (87)
718	Moore Financial	2.3	120.1 (405)	10.1 (266)	1040.3 (143)
719	Kansas Power & Light	2.3	212.5 (185)	28.3 (75)	541.6 (260)
720	Mission Insurance	2.3	189.3 (226)	21.2 (113)	395.6 (313)
721	PHH Group	2.3	209.4 (189)	13.1 (195)	623.6 (231)
722	Peoples Bancorp	2.2	103.6 (488)	6.1 (418)	907.4 (174)
723	Indianapolis Pwr & Lt	2.2	181.2 (236)	26.7 (85)	540.2 (261)
723	Indiana National	2.2	139.2 (335)	8.6 (319)	1231.6 (99)
725	Affiliated Bshs Colo	2.2	111.3 (448)	9.6 (279)	944.1 (166)
726	Public Service N H	2.2	194.4 (216)	42.1 (30)	742.1 (199)
727	Overseas Shipholding	2.2	149.2 (305)	27.9 (77)	586.9 (243)
728	First American	2.2	130.1 (361)	7.9 (345)	1197.5 (106)
728	Arizona Bancwest	2.2	127.2 (370)	7.7 (354)	1082.1 (132)
730	City Federal S & L	2.2	257.0 (132)	6.1 (418)	2100.4 (39)
731	First Hawaiian	2.1	127.3 (369)	8.9 (303)	1111.4 (127)
732	Central Bancshares	2.1	139.3 (334)	9.9 (270)	1240.1 (98)
733	Riggs National	2.1	190.3 (224)	9.5 (288)	1737.1 (52)
734	First Empire State	2.1	117.9 (414)	6.0 (423)	918.3 (171)
735	Old Kent Financial	2.1	131.0 (358)	10.8 (248)	1123.0 (123)
736	Marine	2.0	135.7 (349)	7.3 (369)	1168.1 (113)
737	Commerce Union	2.0	139.6 (332)	4.7 (473)	1144.3 (118)
738	United Missouri Bshs	2.0	113.0 (438)	14.6 (174)	1363.5 (80)
739	Noble Affiliates	2.0	200.2 (206)	35.3 (41)	356.4 (332)
739	CharterCorp	2.0	130.2 (360)	6.0 (423)	1202.5 (103)
741	Hospital Trust	1.9	124.5 (383)	3.4 (547)	1000.5 (155)
742	Pic'n'Save	1.9	93.5 (539)	14.2 (180)	65.3 (578)
743	Valero Energy	1.9	1005.4 (12)	43.2 (28)	648.7 (224)
744	Super Food Services	1.9	598.4 (29)	1.9 (649)	70.5 (557)
745	Kentucky Utilities	1.9	253.2 (139)	28.9 (72)	662.8 (221)
746	American Bancorp	1.9	144.6 (316)	12.0 (223)	1315.9 (86)
747	Natl Central Financl	1.9	152.2 (298)	10.5 (255)	1323.0 (85)
748	Indust Valley Bank	1.8	124.2 (386)	5.5 (448)	1006.3 (154)
749	Boatmen's Bancshares	1.8	141.5 (324)	11.3 (241)	1510.3 (62)
750	Suburban Bancorp	1.8	118.2 (412)	10.4 (261)	1190.8 (107)
751	Kansas Gas & Elec	1.8	196.2 (212)	47.3 (19)	847.1 (183)
752	Citizens Fidelity	1.8	196.0 (214)	14.1 (183)	1352.5 (83)
753	First New Mexico	1.8	116.3 (422)	9.4 (291)	998.3 (156)
754	City National	1.8	123.6 (390)	8.2 (333)	1047.4 (139)
755	First Boston	1.8	793.5 (21)	52.9 (13)	9854.5 (2)
756	Tandon	1.8	86.0 (582)	9.0 (300)	89.2 (501)
757	Golden West Finl	1.7	460.2 (48)	–11.4 (790)	4184.6 (10)
758	Sumitomo Bank Cal	1.7	154.9 (288)	4.4 (486)	1218.8 (101)
759	First United Bancorp	1.7	179.3 (240)	9.3 (295)	1462.4 (64)
760	Continental Bancorp	1.7	159.0 (274)	15.4 (164)	1374.9 (76)
760	Crown Central Petrol	1.7	1059.5 (11)	4.2 (497)	384.4 (319)
762	Shared Medical Systm	1.7	98.3 (509)	12.9 (201)	81.4 (522)
763	Rowan Cos	1.7	242.7 (150)	72.4 (8)	481.1 (284)
764	Idaho Power	1.6	224.3 (174)	48.8 (18)	877.1 (178)
765	Deposit Guaranty	1.6	141.5 (324)	9.9 (270)	1265.7 (95)
766	Iowa-Illinois G & E	1.6	292.1 (97)	33.5 (47)	636.2 (229)
767	First Natl Cinc	1.6	151.9 (299)	15.0 (168)	1383.7 (74)
768	Minnesota Power	1.6	226.3 (171)	30.1 (63)	631.1 (230)
769	U S Trust	1.6	157.1 (281)	9.6 (279)	1412.3 (70)
770	Imperial Corp of Am	1.6	344.7 (78)	–38.3 (807)	3309.0 (18)
771	Merchants National	1.5	170.1 (254)	4.9 (469)	1283.2 (92)
772	Natl Bancshs Texas	1.5	135.8 (347)	10.4 (261)	1163.7 (114)
773	United Illuminating	1.5	288.1 (98)	43.4 (27)	648.3 (225)
774	Nationwide	1.5	467.8 (47)	19.2 (132)	2724.8 (22
775	Zions Utah Bancorp	1.5	178.4 (243)	14.9 (170)	1476.7 (63
776	First Oklahoma Bncp	1.5	251.7 (141)	12.7 (206)	2276.8 (35
777	Helmerich & Payne	1.5	232.1 (168)	51.9 (16)	422.9 (305
778	American Security	1.4	254.6 (136)	19.8 (126)	2352.8 (31
779	Washington Wtr Pwr	1.4	242.7 (150)	41.6 (31)	748.2 (198
780	Fin Corp of America	1.4	573.9 (30)	27.2 (83)	4894.1 (6
781	Belco Petroleum	1.3	261.1 (123)	78.9 (6)	660.6 (223
782	Mary Kay Cosmetics	1.3	235.5 (163)	27.4 (81)	118.0 (439
783	Gibraltar Financial	1.3	436.1 (53)	–21.3 (796)	3868.1 (13
784	Cray Research	1.2	116.1 (423)	15.6 (160)	184.2 (378
785	Dorchester Gas	1.2	965.9 (13)	14.8 (172)	444.6 (294
786	Tucson Electric Pwr	1.2	294.8 (94)	65.6 (11)	1374.1 (77
787	Western Svngs & Ln	1.1	237.7 (160)	–34.2 (804)	2318.2 (33
788	Liberty National	1.1	256.1 (134)	17.9 (141)	2133.0 (38
789	Fedl Natl Mortgage	1.1	6830.9 (1)	–123.7 (808)	67961.8 (1
790	El Paso Electric	1.1	253.1 (140)	66.4 (10)	1067.1 (137
791	Old Stone	1.1	249.1 (143)	12.9 (201)	2018.8 (41
792	Sensormatic Electrns	1.0	68.9 (678)	16.1 (158)	122.3 (428
793	Amer Savings & Loan	0.9	313.0 (81)	–14.3 (794)	2506.1 (25
794	Mesa Petroleum	0.9	415.2 (59)	143.9 (20	1846.3 (46
795	Whitney Holding	0.9	271.8 (115)	43.7 (25	2342.1 (32
796	Fin Cp Santa Barbara	0.8	301.8 (86)	–11.5 (791)	2462.2 (27
797	Key Pharmaceuticals	0.8	106.9 (471)	16.0 (159)	80.5 (527
798	Pacific Resources	0.7	1648.6 (4)	13.1 (195)	727.8 (205
799	Celeron	0.7	1275.8 (7)	88.0 (3)	960.4 (163
800	TRANSOHIO Fincl	0.7	304.7 (82)	–34.0 (803)	3051.3 (20
801	Broadview Financial	0.7	283.5 (105)	–36.9 (806)	2807.3 (21
802	Financial Federation	0.6	501.3 (40)	1.0 (705)	4731.7 (7
803	Gibraltar Savings	0.6	661.1 (25)	–36.6 (805)	6035.7 (4
804	Berkshire Hathaway	0.6	805.5 (20)	54.9 (12)	2588.2 (24
805	Southland Royalty	0.5	656.7 (27)	52.6 (14)	1253.4 (96
806	Convergent Technolgs	0.4	233.6 (167)	28.8 (73)	244.2 (36
807	First Executive	0.4	4589.6 (2)	70.8 (9)	9277.5 (3
808	Pogo Producing	0.2	1311.2 (6)	241.9 (1)	4517.6 (9

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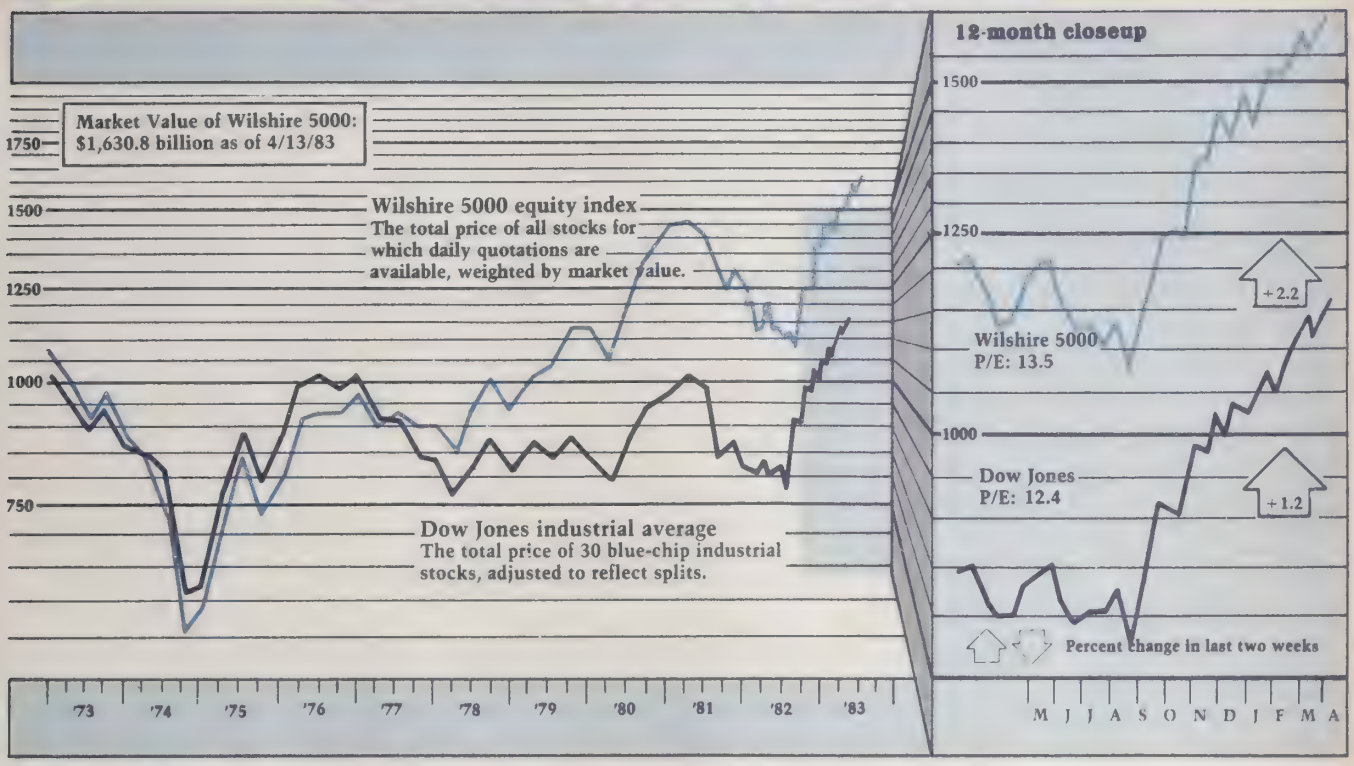
The Forbes/Wilshire 5000 Review



Mature growth? After weeks of sideways motion—and even a bit of backsliding—the averages are setting new records. By gaining 1.2% over the last two weeks, the Dow hit an alltime high of 1156.6. And the broad-based Wilshire advanced 2.2% over the same period, reaching another peak. Still, the market is moving more cautiously than it did earlier. While daily volume is still high, it is well below the record levels of August and October. The same goes for day-to-day swings in the major indexes. Meanwhile, with a P/E of 13.5 on the Wilshire, stocks continue to get pricier, relative to their depressed earnings.

Energy stocks are slowly moving back into favor. In fact, the sector analysis on the next page indicates that they are the major force behind the market gains. Regardless of whether this is a long-term trend or a short-term trading situation, the energy-dominated Amex, up 3.4% over two weeks and 4.8% over four, has benefited the most.

Numbers comparing the stock performances of large versus small firms are a new part of our Investor Yardsticks table. Note that small companies continue to outperform large companies. But the recent differential between the two groups is half the 52-week record. This could mean that investors are losing some of their fascination with the little guys.

Close-up On The Equity Markets

Performance of six leading indexes

Percent change	Wilshire 5000	Forbes 500[1]	Dow Jones industrials	NYSE Composite	Amex Market Value Index	NASDAQ Composite
in last 4 weeks	4.3	4.6	3.6	4.2	4.8	4.3
in last 52 weeks	37.2	34.9	38.0	35.1	45.8	52.9

Stock performance based on five key investor yardsticks

Percent change	Company size		Volatility[2]		P/E multiple		Dividend yield		Growth profile[3]		Share price	
	large	small	high	low	over 25	under 5	over 7.5%	none	high	low	over $40	under $4
in last 4 weeks	3.7	6.4	6.1	3.4	4.7	4.1	2.8	4.3	5.0	3.8	4.7	5.4
in last 52 weeks	37.1	93.0	89.7	44.2	65.9	106.5	37.4	100.4	102.5	46.1	48.9	82.8

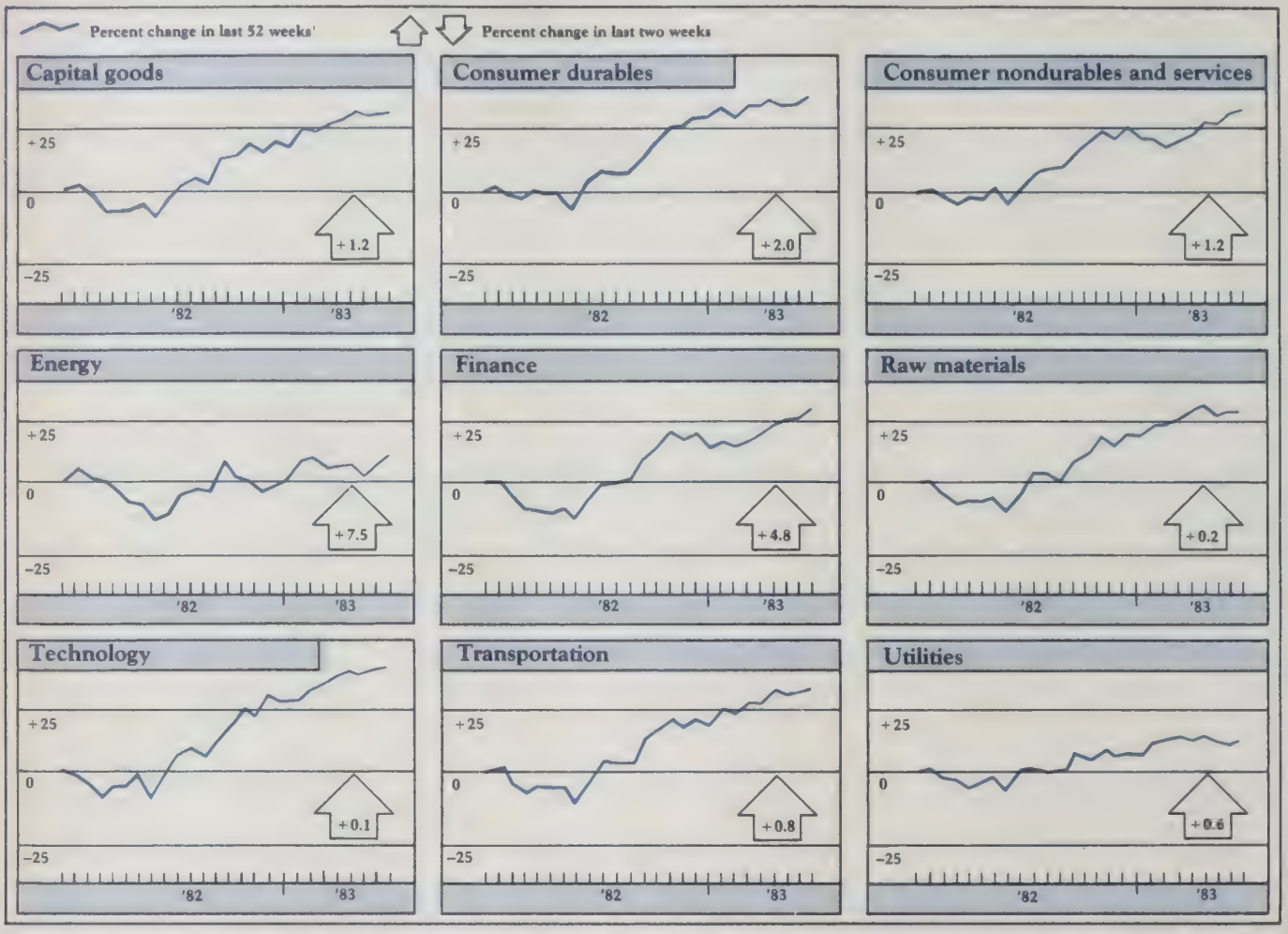
[1]Based on sales.
[2]A stock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations, low-volatility issues are more stable.
[3]A quantitative evaluation of a stock's growth image, determined by Wilshire Associates.

Note: All data for periods ending 4/13/83. Prepared by Wilshire Associates, Santa Monica, Calif.

Where The Action Is

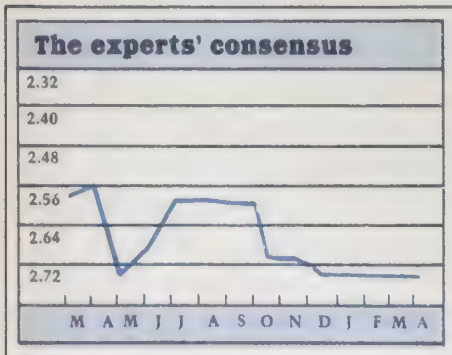
Oil and money. The energy and finance sectors helped to push the market to new highs. During the last two weeks the oil stocks advanced 7.5%, and the finance group was up 4.8%. The other seven sectors, however, failed to keep pace. The weakest link was the technology group, which managed a slim 0.1% gain. Disappointing quarterly earnings reports for a number of well-known firms like NBI and Prime Computer helped point out the vulnerability of the high-tech group.

Consumer durables, meanwhile, benefited from the strength of the auto stocks. Successful new offerings by Chrysler and AMC added close to half a billion dollars in market capital. A pickup in auto sales also added to this sector's appeal.



What The Analysts Think

A little more doubt. Although sector rankings have not changed in nearly two months, analysts became a bit more pessimistic in the last two weeks. The buy/sell recommendations on four of the sectors and the consensus moved slightly closer to the sell side. Raw materials, however, shifted slightly in the more positive direction.



Rank	Sector	Current opinion	Rank 2 weeks ago	Rank 4 weeks ago
1	Energy	2.65	1	1
2	Utilities	2.68	2	2
3	Technology	2.71	3	3
4	Capital goods	2.72	4	4
5	Transportation	2.74	5	5
6	Raw materials	2.75	6	6
7	Finance	2.80	7	7
8	Consumer nondurables	2.82	8	8
9	Consumer durables	2.88	9	9

Opinion ratings are ranked on a scale of 1 (strong buy) to 5 (strong sell). Data reflect the views of 200 institutional analysts. The consensus of opinion graph is the composite rating of 1,200 stocks, while the sector breakdowns correspond to industry groups graphed above. All figures are weighted for market capitalization.

Note: All data for periods ending 4/13/83. Prepared by Wilshire Associates, Santa Monica, Calif.

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GRUMMAN

There may be a better buy than shares in a mutual fund. Look what happens to stock in the fund's management company.

Buy the moneyman

Jack Cogan, president of Pioneer Group
"You could be talking wild numbers."

By Ellyn Spragins

Carl Yastrzemski he is not. But despite his snappy red bowtie and lawyerly manner, Jack Cogan, 57-year-old president of Boston-based Pioneer Group, a mutual fund management company, talks a good game.

"If you try to knock the ball out of the park," he says of his company's stock-picking philosophy, you may take just an extra swing that will make you miss. We try to hit singles rather than home runs."

That fundamentalist approach, unchanged since Pioneer was founded by Cogan's partner, Philip Carret, in 1928, has created some loyal shareholders. In 55 years none of Pioneer's four funds has experienced a year of net redemptions. Even during the 1980 rush to money funds, Pioneer sold three times as many shares as it redeemed, while many mutual funds were bleeding.

Pioneer's consistently above-average, but hardly razzle-dazzle performance (though Pioneer II landed on the FORBES mutual fund honor roll last year), has kept shareholders happy. But there's a bittersweetness in Pioneer's performance. Few of its holdings have come anywhere near matching the performance of a stock Pioneer doesn't hold—its own management company, Pioneer Group.

One of just seven publicly traded mutual-fund management companies, Pioneer Group earned $4 million last year on revenues of $15 million. Its stock has sailed from $3.38 per share in 1979, when the company went public, to $40 recently. "If you asked me four years ago whether it would be at this level," confesses Cogan, who owns 22% of Pioneer, "I would have been surprised."

In some ways it is surprising. Management companies make money by selecting stocks that appreciate, of course, because the management takes a tiny fraction of total assets as fees. Still, fund managers can always make more money by selling more shares, which also increases assets, if not performance. Pioneer hardly sells aggressively. It rarely advertises for new shareholders. It has failed to create a wide diversity of specialized funds to compete, say, with Fidelity's 28-fund circus. Most notably, it never even started a money market fund.

"I think we missed the boat," says Carret, referring to the money market funds. The fund's founder, the 86-year-old Carret, a graduate of Harvard, Barron's and World War I aviation school, is nothing if not frank. "I thought it was a temporary phenom-

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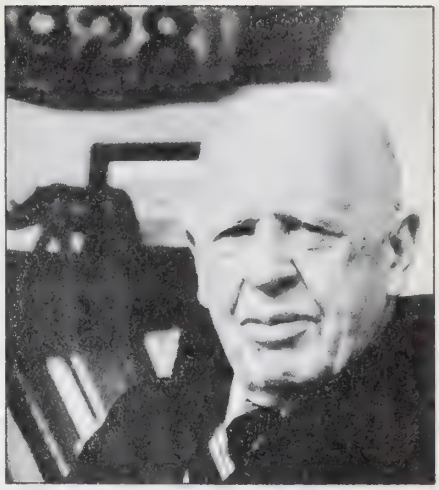
enon, but it turned out to be more permanent than I thought."

But consider Pioneer's similarly demure approach in launching Pioneer Three—a small-company fund—last November. "Some people looked at me incredulously," says Cogan, "because we said we would take steps to restrain the influx of money into the fund." Pioneer prevented the switching of money from its other three funds into Pioneer Three and imposed a ceiling of $100,000 on purchases to insure concentration in small company stocks. Pioneer Three thus raised only $50 million when it could have raised up to $200 million, Cogan says. Pioneer also often turns away business from private pension funds, 21 of which it manages.

Constraining growth makes for little glamour, but Pioneer's management seems unconcerned. "Why, if I had a set of colleagues who all of a sudden decided to try to become popular, I think I would quit," Carret says. "We believe in doing things because we think they are sound."

For Carret, that means ignoring noise from Wall Street. He and Pioneer's 15 analysts look for basic value and unimpeachable management and don't care whether a stock is hot. Pioneer recently bought $15 million worth of Schlumberger, in the deeply depressed oil-service business, a loser even in this bull market. But it has bigger holdings in American Telephone & Telegraph, Union Oil and Motorola. Pioneer hangs on to a typical portfolio holding for at least three years; no quarter-end window dressing allowed. That way, if Pioneer picks well, which it usually does, the stock will perform in time even if the market doesn't.

Over the years, Pioneer has patiently developed a network of brokers and dealers willing to take a good deal less in sales fees from Pioneer than they can get from other fund managers, and that has kept Pioneer's distribution costs low, enhancing earnings.



Phil Carret, director of Pioneer Group
He's not in a popularity contest.

So far as earnings are concerned, Pioneer has arrived at the right place at the right time. The growth potential in the pension management industry, for instance, is alluring enough to make some observers keen on Pioneer's $40 stock even though that price is 20 times 1982 earnings. The pool of pension assets, now around $800 billion, is expected to grow, by actuarial estimate, to $3 trillion by 1990. Fund manager John Templeton and others speculate that a lot of that pension money will go into securities.

Add all this to Pioneer's low-risk investment approach and relatively fixed operating costs, and you begin to see how the company's earnings can be leveraged *(see box)*.

"Every new investment dollar brought in generates crazy profit margins, probably on the order of 80% to 90% pretax," says a trader in Pioneer Group stock, "so you get incredible leverage."

Pioneer may also profit from its recent plunge into venture capital. It is creating a limited partnership with $15 million to $20 million after having privately invested a total of $2 million in five small businesses. The investments—mainly in medical design and computer software companies—are actively managed by a team that includes a chemistry Ph.D. and a blood disease specialist.

But levelheaded skepticism remains. Ask Cogan if his razzmatazz venture-capital fling will succeed, and he says, "Oh, you could be talking wild numbers, but lightning"—the deadly kind—"could strike, too." ■

Pure play

Randy Updyke, 39, of Philadelphia was one of the first money managers to rediscover this simple truth: When a mutual fund's portfolio rises in value, the earnings—and share price—on the fund management company's own stock should do far better. "It's the purest play," says Updyke, who bought 100,000 shares of Pioneer Group for $4 or so a share in the late 1970s. The shares he still holds are worth about $40. In fact, in those years Updyke took a third of the $1.8 million he was privately managing for clients and bought mutual fund management stocks with it. That was a lot of money, for only a few fund management stocks are publicly traded, and Updyke wound up with positions of 5% to 20% in companies such as Keystone Custodian, Eaton Vance, National Securities & Research and Pioneer.

Randy Updyke

It really amounts to leverage without debt, and, says Updyke, "the trick is to leverage the market on the upside." In a rising market, the manager's investment fees rise along with portfolio values, but expenses remain constant. And in a rising market, investors buy more mutual fund shares, further leveraging earnings at negligible increase in costs. You may lose, of course, in a down market, but not as much as you'd lose leveraged with debt. Actually, it has been years since a down market in fund management stocks. And if the current bull market persists, it will take years for the fund stocks to deflate.

Updyke's analysis paid off. That $600,000 has grown to $4 million. Now he manages some $40 million, holds 2.25% of Pioneer's stock, 18% of National Securities, 16% of Eaton Vance and 4% of Franklin Resources.

His own view is that the market "has come a long way, but we still haven't reached the giggle stage." That is when management companies will collect cash in bushels because, at market peaks, investors panic into funds.

Updyke remains sold on fund stocks, and he has wandered as far as Hong Kong to invest in a similar company—Sun Hung Kai, a brokerage firm. Merrill owns 25%. But Updyke is there, he says, because "it's the cheapest, most dynamic market in the world. I think it will take off."—E.S.

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Now that the palmy days are over for the money market mutual funds, where's the best place to put that money?

THE GOLDEN MEAN

By Ben Weberman

Since December 1982, about $52 billion has flowed out of money market mutual funds—hardly surprising since they are paying only 8% or so to shareholders, compared with 13.3% as recently as last July. At the same time, $300 billion flowed *into* the banks' and thrifts' new money market deposit accounts. But contrary to popular belief, it is not the same money; most of that $300 billion came out of other instruments inside the banks and S&Ls, like repurchase agreements and maturing 6-month and 30-month deposit certificates.

So what happened to the money market funds' $52 billion?

According to recent surveys by fund managers, perhaps as much as half of it is going into other mutual funds—stock funds sometimes, but frequently into bond funds.

The reason is obvious. When interest rates are falling as they are now, the trick is to ride the yield curve, to swap out of instruments whose rate is tied to falling short-term rates, and into something with a longer maturity. That way, you lock in today's higher rates instead of tomorrow's presumably lower ones. The yield is not only higher, but the rate of return stated today is close to what you will actually receive over the full life of the issue.

Ben Weberman is economics editor of FORBES *magazine.*

The yield curve on Treasury securities provides a pattern for tracing this effect. Three-month bills yield 8.4% as this is written. Move into two-year Treasuries and the yield increases to 9.45%; extend maturity to 10 years and the yield goes to 10.35%. From there it increases to 10.4% in 30 years.

Is this the right thing to do with the money you take out of those once glamorous but now lagging money market funds?

It is if you keep in mind that extending maturities is a little trickier than it sounds. The fact is, there is a big, not-so-obvious disadvantage. Short-term rates may be falling right now, but short-term investments always carry a benefit you don't get in longer-term instruments: dollar-for-dollar return of principal. By extending maturity you lock in today's yields, but you also open yourself to market risk and the possibility that you won't get back dollar-for-dollar principal when you decide to sell.

Here's what I mean: For a 1% decline in interest rates, a 2.5-year bond priced initially at $10 to yield 11.5% would gain 0.21 in price. On a 7-year bond, the gain would be 0.50, and on a 20-year bond, 0.83. If interest rates drop 3%, those price changes become more dramatic: 0.65, 1.16 and 2.86, respectively.

This is fine if rates continue to fall. But the opposite happens if they stop falling and start rising again. A 3% interest rate *increase,* for example, would erode 20% of the price of a 20-year bond.

The Vanguard Group of mutual funds has come up with a compromise between the market risk of long maturities and the income risk of short maturities. Called the Short Term Portfolio, it was created last November by Vanguard managers seeking a money market mutual fund successor.

Vanguard's STP keeps a substantial portion of its $120 million assets in finance-company bonds and little in industrial bonds, utility paper or Treasury issues. This results in a return that is at least 1% higher than Treasuries. The reason finance company securities are used is that industrial companies do not issue much short-term debt, and their intermediate-term issues usually come due in not less than seven years, most likely ten years. But banks and finance companies (or finance subsidiaries of big corporations) issue debentures covering the entire spectrum of maturities.

Vanguard's STP manager thus can select maturities as short as two to four years but with high yields. For example, among the larger STP holdings on Mar. 31 were $4.6 million in Avco Financial Services debentures due 1985 and 1987, $4 million of Bank of America due 1987, and $3 million Exxon Corp. notes due 1987. In the federal agency sector, the biggest block was $7 million Student Loan Marketing Association debt due 1987.

John C. Bogle, chairman of Vanguard, says the fund has successfully held down the variations between high and low prices since its inception. Prices have ranged from a low of $9.98 a share to a high of $10.13 a share. At 10.3% yield, the return is substantially greater than the 8% average on money market funds or the 8.5% to 9.5% on many banks' and thrifts' money market deposit accounts.

The portfolio manager tries to keep current yield—that is, the actual dividend payments as a percentage of the current price—close to the yield to maturity, which reflects appreciation or depreciation of price as well as dividend payments. So only a small part of his portfolio is older issues that carry low coupons and trade at a deep discount because, for the same yield to maturity, they would generate a lower current yield than bonds with today's coupon. Similarly, he usually avoids high coupon, high priced bonds. They provide high yields. But they also stand a good chance of being called.

The Golden Mean, the Greeks called it. ■

Many investors, persuaded that opportunities have become less attractive at home, are looking overseas.

GO WEST... AND EAST

By Srully Blotnick

Having paid their taxes, most of the investors I monitor usually turn their thoughts to vacations abroad. It's happening this year, too, but with special force, for two reasons.

First, these investors are at least dimly aware now, and becoming more knowledgeable daily, of the strength of the U.S. dollar relative to the currencies of the countries they want to visit. Typical comments: "I just found out that I can get over 7 [French] francs to the dollar," and, "Did you know that the [British] pound is now at—or even below—$1.50?" Many of them have an idea of what a reasonable rate of exchange for each currency should be. Prior trips to Britain make them guess that the pound "ought to be worth" $2.21—that was the median estimate of 178 investors. They felt that the French franc should net 4 or at most 5 to the dollar.

Badly out of date though they are, these pictures from the past are going to have a major impact in the near future. That's because current exchange rates are inspiring thoughts of investment windfalls.

What would they invest in to obtain one? The trip itself, to begin with. As one San Franciscan put it, "Right now, exchange rates give me a chance to have a bargain-rate vacation." In previous years, particularly during the late Seventies, many of these people went on vacations expressly for the purpose of buying collectibles—not intangibles—inexpensively. "Pre-Columbian," one couple used to call them, explaining, "pieces that could be had for prices that prevailed before our neighbors in Columbus—and friends in Cincinnati and Cleveland—got there, too."

The second, and equally important, reason for the resurgence of interest in travel abroad is connected with what a growing number of investors describe as "the exhaustion of good investment opportunities in the U.S." They think stock and bond prices at home are less appealing now than they were a year ago. They also find prices for land and houses unattractively high. Obvious solution: Combine a pleasure trip abroad with a survey of investment possibilities.

The trend is just starting, but three fascinating points that emerged in my interviews warrant notice.

1) Americans went abroad in the 1970s looking for things that could be lugged home in a suitcase. Now, almost offhandedly, they are looking for land and buildings—nonportable items that, at the very least, are pretty and might increase substantially in value over the years.

As property owners everywhere have learned, sinking capital into a particular setting brings with it an intense interest in local and regional affairs. It's safe to predict that even if only one-third of the people who say they would like to own property abroad actually purchase it, protectionist and isolationist sentiments in the U.S. would be moderated considerably.

2) U.S. investors now view exchange rates as reflecting a foreign nation's political situation at least as much as, if not more than, its economic prospects. That's a new twist on an old theme. Politics, as well as economics, has always played a role in setting currency values, and many analysts rightly claim that the two are indissoluble. The twist is that the investors in my sample *like* the idea of exchange rates as political barometers. Contemplating a house in, say, Portugal or Spain—countries with at least some risk of political instability—they feel the dollar's current strength gives them, in effect, a calculable discount to offset the risk.

3) The third and final point is to me the most interesting—and ironic. In the late Seventies, a host of Chicken Littles tried to stampede the public into selling everything and heading for the hills, or to foreign havens. Why? Because, as they put it at the time, "the economic world as we know it is coming to an end." Well, the world is still with us, pretty much unchanged.

Unfortunately, that didn't stop the fearmongers from heading for the hills with a quick fortune—made by alarming their followers. "Fortress America is crumbling," the doomsayers were announcing endlessly only yesterday. What were investors supposed to do? Two things: First, convert their paper money into gold and silver; second, start looking in rural America and overseas for safe havens. The latter pitch was every bit as powerful as the former in making people attend expensive "hard money" conferences. In fact, more than half the people I surveyed at these conferences told me that they had come primarily to find out how to be "international investors" and "to learn how to diversify my portfolio away from U.S. stocks." What was striking, though, was that these people listened intently but bought almost no foreign stocks or real estate. Basically, the conferences gave them an excuse to hoard their money, while pooling their anxieties.

Only now, with the crowd dispersed and confidence growing daily, does investing abroad really strike them as an appealing possibility. Marketers take note: The pursuit of profit will pull surplus capital abroad far faster than fear. ■

Dr. Srully Blotnick is a research psychologist and author of Getting Rich Your Own Way *and* Winning: The Psychology of Successful Investing.

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Some things may be cheaper by the dozen, but not the kind of service Donald Gamache and his Innotech provide for some of America's biggest corporations.

THE IDEA MAN

By Thomas P. Murphy

"Ideas," muses 47-year-old Donald Gamache, "are a dime a dozen."

Well, not everybody's ideas. Innotech, Gamache's company, charges $11,800 a month to think of new product ideas for the likes of General Electric, 3M, Scott Paper, General Foods, et al. The idea-generating cycle is six or seven months and, according to Gamache, the fee just covers costs. Profits come from what Gamache calls a "success contingency." It is, in effect, a royalty of from 0.5% to 3% of gross sales of the product or service developed from Innotech's search.

Why have so many big companies, and some smaller ones as well, been willing to pay the considerable difference between a dime a dozen and Innotech's price? Gamache, a voluble charmer, is happy to answer that question. "There is no such thing as a good idea," he says. "We spent eight years, more than half of Innotech's existence, learning how to come up with *quality* ideas." The difference? "Quality ideas really fit the company," Gamache explains. Furthermore, the idea is only half the job. The other half, says Gamache, is "working within the corporation's culture to get the idea implemented."

Innotech's approach to ideas begins conventionally, a one-day information-gathering session with the client's team that is always held in the client's offices. The team is comprised of from five to seven people, and typically represents every major functional area in the client's company.

The purpose of the meeting is not to think of new-product ideas, but to define what the company's criteria are for a successful new product. A chemical manufacturer, as it turns out, is looking for new applications for a 50-year-old chemical that everybody believes has saturated all its possible markets. A smallish zinc casting company, selling only to original equipment manufacturers, wants diversification.

The first meeting, then, defines the mission—what kind of product does the company really want? How much is it willing to risk—not invest, but possibly lose—to get it?

The next move is a trip to the brain bank. Tucked away in the memory of Innotech's computer are the names of 4,000-or-so experts. The first "sort" is for broad-based, horizontal (in Innotech parlance) experts—five to seven of them. They come from fields that seem to be related to the client's search. The day I visited Innotech's headquarters in Trumbull, Conn., the search was on for experts in surfactant technology. The experts are briefed by mail on the nature of the assignment, though they are not given the client's name, and invited to a meeting in Trumbull. That meeting is a kind of disciplined bull session, with participants throwing out all kinds of thoughts about social and economic trends, as well as possible products, or at least areas to look at.

This first pass is done uncritically and at breakneck speed. A three-hour meeting generates hundreds of ideas, most of them useless.

Clients may or may not be sitting in. Gamache wants to avoid—at any cost—someone who is critical or someone who dominates the meeting. Criticism breaks the easy flow of thought. To deal with the compulsive talkers, Gamache resorts to flattery: "You are such a marvelous source of ideas," he tells them, "that I want one of my associates here to debrief you personally."

Meeting three is again with the client's team. Its purpose is to sort through the effluvia of meeting two. What is worth pursuing?

Innotech then goes back to its computer, this time looking for what it calls "vertical expertise." A vertical expert, for example, might know a lot about chemicals used in one branch of the marine industry. Then there is another meeting in Trumbull, and a narrowing focus on ideas and markets and, typically, still another meeting, again with vertical experts, both to refine ideas produced in the previous meeting and to generate more.

Further iteration may or may not be needed. At any rate, the hundreds of ideas are now winnowed down to one idea, *the* idea, and that is what is presented to the client.

The ideas are not such stunners. But they make sense. The zinc caster, for instance, diversified into manufacturing fixtures for hanging houseplants. That idea stemmed from an expert's observation that there was growing use of houseplants and nothing in the stores for hanging them from the ceiling. Since the client's team has been involved with Innotech for months, if things have worked right, there is a consensus within the company for the idea finally picked. That helps overcome the N.I.H. (not-invented-here) prejudice.

As for implementation, Gamache likes to team a bright, younger executive hoping to build a career on the idea with a seasoned hand who can guide the younger person through the pitfalls of the organization. The worst outcome, Gamache notes, is when the president of the company decides the idea is so great that he wants to manage it personally. "You always go back," Gamache says sadly, "and find that the president hasn't found time to do anything with the idea and his enthusiasm is waning." ■

Thomas P. Murphy heads a venture capital firm, Partnership Dankist, Stamford, Conn.

TIME

Cleveland Museum of Art

Different strokes.

A new look at the work of America's finest realist painter opens the eyes of a generation raised on impressionist and nonobjective art.

Realistic painting is so reassuring. Things are always what they seem, and a river is not Life, but a river.

On the other hand, if it's that obvious, why is a realistic painting better than a photograph, or a competent magazine illustration?

Recently, in its Art section, TIME Magazine hailed a new exhibit of the works of Thomas Eakins, America's genius of realistic painting, and without effusion or obscurity addressed the issue head-on. The main point, said TIME's art critic Robert Hughes, is that Eakins loved the facts he showed.

In painting a picture, he was not merely recording, but negotiating an agreement between what he saw, what he remembered, what he felt, what he wanted the painting to communicate.

In the Eakins article, Hughes also reasserted a kind of benchmark for art criticism: enthusiasm, but not a peremptory enthusiasm; a drawing of connections between painter and painting, and between painting and observer; and an ability to explain without mystery the terms in which a work of art may be admired.

Like Eakins, TIME has its own sense of mission: to document reality with scrupulous accuracy, to invest events with life and color, to put them into perspective, to achieve the realist's ambition of showing them to be more than a random sum of parts. In achieving that ambition, TIME each week attracts more than 29 million men and women around the world– readers who get more out of TIME, because more goes into it.

TIME

More goes into it.

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OUT-OF-SHAPE PORTFOLIOS

By Ann C. Brown

Trim, slim, granola-crunching, tofu-munching investors frequently appear in our offices, weighted down with portfolios bulging with weak and flabby stocks collected and neglected over the years. More often than not the owners of these disappointing and dated issues explain that these are equities they were once advised to buy and put away. The tipsters should have been put away. Stocks need constant care by active and well-exercised financial minds.

Even more important than the condition of each individual security is the composition of the entire portfolio. Most investor unhappiness is the result of portfolio imbalance or inappropriateness. Investment objectives change, and stocks suitable for a young married couple with two incomes and zero children are likely to be all wrong for middle-aged parents facing three staggering tuition bills. Then there is the older generation and their portfolios. While many retirees or soon-to-be retirees look to their securities to provide extra income, others can or should have surprisingly aggressive portfolios, as they are sufficiently well off to assume investment risks that relatively high incomes and low expenses permit. Investing is an intensely personal affair, yet few people spend as much time determining their particular investment needs as they spend selecting new cars.

All dabblers in the market, most semi-serious investors and more than a handful of pros I know could benefit from a thorough portfolio checkup. The advice of a truly experienced (and rare) expert can be invaluable—and expensive. A little self-analysis of your own portfolio can often be helpful.

- Gather together all the facts about your portfolio—the issues, quantities, prices paid, purchase dates, dividend yields, gains and losses, P/E ratios, estimated growth rates, etc. Just looking at this information should suggest action.
- Group the securities into industry classifications and calculate the percentage each stock and industry represents in your portfolio. If any one stock exceeds 10% of your portfolio or any industry more than 20% to 25%, consider reducing the exposure, unless you have a very good reason for not doing so.
- Examine each security closely. Ask yourself whether you would buy more shares today if someone suddenly gave you $100,000. If not, sell, unless doing so would cause adverse tax consequences.
- Look carefully for "manacled money"—funds locked up in stocks that have declined and that you have hoped and prayed would recover to the prices originally paid, so you could get out with no loss of cash or face. This also applies to monies locked up in yesterday's gainers that are unlikely to rise in today's market. These are holdings that you have become emotionally attached to because they were once good to you or to your forebears. My advice is to sell these antiques and reinvest the proceeds in contemporary stocks you may love even more.

Okay, you say, but what are some growth stocks that aren't already priced out of sight, now that the stock market is nearly half again as high as it was last summer? Well, for openers, there is *Black & Decker Manufacturing* (19), which is an old company with new promise. Long known for its premier do-it-yourself power tools, the company is reaching out to the busy female consumer with valuable timesavers, like the Dustbuster and the Spotliter.

Black & Decker also plans to launch an entirely new professional-power-tool line. This should help earnings, as should the anticipated pickup in overseas sales, which have suffered from unfavorable currency translations. For fiscal 1983, ending in September, Black & Decker could show earnings from operations of approximately $1.20 per share, vs. 97 cents last year. Early 1984 estimates are for $2.25 per share.

Also attractive is *Levi Strauss* (48), which has had a handsome runup recently, but which stands to go higher once investors begin to believe the company can earn $4.75 per share this fiscal year, $6 or more in 1984 and perhaps as much as $8 per share in 1985. Last year the company's earnings in its large foreign markets were hurt by the recession, coupled with an unusually strong dollar. However, the picture is brightening and the company has enjoyed success in its new Sears and J.C. Penney outlets.

The 1984 Olympics and TV's longest maxi-series, the presidential election, should improve the already sharp picture for *American Broadcasting Cos., Inc.* (65). Big boosts in corporate advertising budgets, which, in many cases, were frozen or cut back during the recession should help, too. Earnings estimates for ABC for this year are in the $6.10-to-$6.25-per-share range, up from $5.54 in 1982. Next year $7.50 per share seems possible, and the stock, if it sells near the current market multiple of 12, has an upside potential of 40% to 50%.

Better-Than-Even-Money Department: Chances are, *Waste Management* (46) will be selling higher a year from now. ■

Ann C. Brown is chief executive officer of the equity advisory and portfolio management firm of A.C. Brown & Associates.

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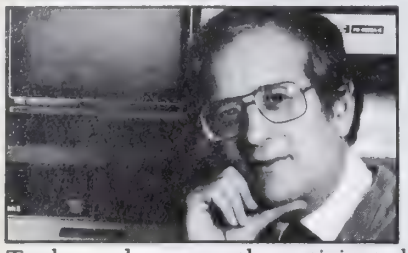
The runup of cattle over hogs has been overdone. A correction in this spread would offer a nice profit opportunity.

OINKS VERSUS LOWS

By Stanley W. Angrist



Traders who correctly anticipated the fundamentals in the meat markets in recent months, going long cattle and short hogs, have done nicely. The cattle premium of under 2 cents per pound in early December widened, to more than 17 cents per pound, on the August contracts. It looks to me, though, that the cattle markets are at a turning point. Let's see why this spread has performed so well thus far and why, despite some evidence to the contrary, a different strategy now makes sense.

The Seven-State Cattle-on-Feed report released Mar. 14 by the U.S. Department of Agriculture showed that beef supplies will be less plentiful this summer than previously estimated. True, the number of cattle on feed was 111% of a year ago. But that report doesn't yet reflect the fact that placements of cattle in feedlots during February declined 11% from February 1982 or that marketings increased 7% from a year earlier. Muddy feedlots during January and February discouraged cattle feeders from heavy placements. Also, the Payment-in-Kind (PIK) program, recently introduced by the U.S. Department of Agriculture to reduce grain production, provides an incentive to graze cattle on land that in the past would have been used to raise grain, such as wheat.

The fundamental outlook for hogs, meanwhile, as revealed by the March Hogs and Pigs Report, remains negative, too. Producers have started to expand herds much more rapidly than previously believed. The bearish import of this, as the accompanying chart shows, has put live hog prices under pressure.

Nor is that all the bearish news from hog country. Responding to profitable feeding margins and ample feed supplies, the inventory of all hogs and pigs, at 40.6 million head, was up 3% from a year ago. There has also been a 6% increase in the number of hogs kept for breeding. Clearly, breeders intend to increase herds later in the year and into 1984.

Thus, the fundamentals indicate that the way to bet remains long cattle/short hogs. I believe, however, that the spread has gone about as far as it should in that direction. The way to play it now is in the opposite direction. Here are the more important reasons:

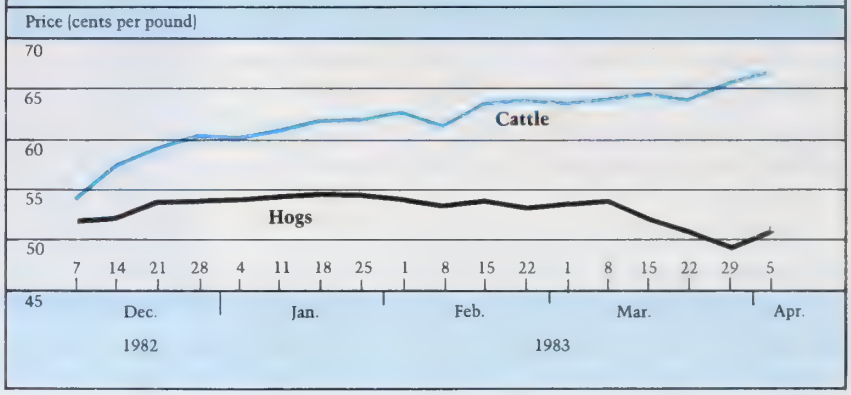
Large numbers of cattle on feed, as noted in the cattle report, will be coming to market during the summer. Feedlots will soon start to bulge with cattle that must come to slaughter. On the other hand, hog slaughter will begin to decline toward seasonal lows, reached in July. One factor that might slow the expansion plans of hog producers is the sharp increase in corn prices caused by the PIK program. These higher feed prices will reduce the profitability of hog production. Such a situation should act as a safety net under hog prices.

Ideally, the hogs versus cattle spread should be put on on an "equal-weight" basis. One contract of live cattle is for 40,000 pounds, while one contract of live hogs is for 30,000 pounds. Thus, I would recommend buying four contracts of August hogs, while selling three contracts of August cattle, with a premium of at least 16 cents per pound to the cattle. I would risk no more than 200 points ($800 per individual spread, or $2,400 per spread package of 3 cattle/4 hogs) from my entry point. The spread could narrow as much as 500 points ($2,000 per spread or $6,000 per package). This is not a riskless spread. Therefore, traders or their brokers must pay some attention to it.

The margin per individual spread at most houses is the margin required on the cattle side, or about $1,200. The round-trip commission should be about $120 per spread. ■

Cattle call

Many observers think that the rally in cattle is nearing its end. Since a substantial sell-off in hogs has already occurred, an easing of cattle prices would cause this spread to narrow.



Stanley W. Angrist is a commodity speculator, consultant and longtime observer of the commodity markets.

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RETIREMENT FOR YOUNGSTERS

By Ashby Bladen

Our financial system is becoming so unstable that I believe young people should start planning for their retirement in the year they get their first paycheck. People already retired will probably continue to get the standard of living that Social Security currently appears to promise. But it's doubtful that this will be true for people in the middle of their careers. It is highly unlikely for youngsters just starting out. They will probably be called on to pay taxes to make up the huge actuarial deficit in the retirement fund—it now amounts to $4 trillion—but I believe it will not be possible to provide them with commensurate benefits. The sweetener for them will be frequent increases in the amount that they can save for their own retirement on a tax-advantaged basis. If you are just now plunging into the world of work and pay, I urge you to take advantage of all the tax breaks you can, right from the very beginning.

Don't let today's headlines lull you into complacency about either inflation or Social Security. At this stage in the business cycle, our domestic policies always turn excessively inflationary. What is different this time is the offsetting effects of three other forces. The first offset is the continuing effects of the severe recession that we are just beginning to recover from. The second is the overvaluation of the dollar for commercial transactions caused by the high interest rates that make dollars attractive for financial investments. The third is the oil deflation that we have been importing from countries that have borrowed excessively and now have to sell their oil for whatever it will bring to avoid defaulting on their debts.

The first two offsets are likely to prove temporary. The third is likely itself to be offset, in turn, by government policies that aim to "protect" the American people from oil deflation. We have already been protected by an increase in the gasoline tax, and we will probably be further protected by a high tariff on imported oil. So I am basing my business strategies on the assumption that we will have to take at least one more ride on the inflationary merry-go-round before the restoration of financial stability becomes politically feasible.

The worst trouble with Social Security was not even mentioned by the President's commission in its recent report. The Social Security retirement scheme is completely different from the retirement annuities that life insurance companies sell; the payments made into it are not saved to provide a fund out of which benefits could be paid when the payers retire. Instead, they are used to pay benefits to the people who have already retired. That made Social Security very popular from the beginning. And since the politicians thrive on popular things, Congress has consistently raised the benefits more than the taxes.

But now the chickens are coming home to roost. Since the Social Security taxes are paid right out again in retirement benefits, they do not provide true savings. That is, they buy no tools to raise our national standard of living by increasing the productivity of human efforts. Indeed, Social Security *discourages* the savings that people would otherwise make to provide for their own retirements.

This country's worst economic problem, I would argue, is its relatively low savings rate. The biggest cause of that problem is the Social Security scheme. Either our Social Security system will eventually be converted into a savings and investment scheme similar to the annuities that life insurance companies sell, or it will depress our children's standard of living.

The first alternative has its own dangers. It would mean that about half of our national savings would be invested by politicians. Politicians will invest heavily in obsolete industries to save jobs, but they are unlikely to invest in new ideas that have a great future but do not yet have an important constituency. An economy in which politicians control the investment process is likely to be a stagnant economy.

A better and more likely solution, once the American people understand that Social Security cannot survive unchanged, would be to cap it. Those who have paid into it and are counting on it would continue to get the benefits, but the system would cease to incur obligations to young people coming into the work force. But that leaves unresolved the problem of the accumulated deficit, that little matter of $4 trillion. The deficit is the reason that young people will have to pay Social Security taxes but are unlikely to get commensurate benefits.

The sensible way to help them would be to let them make considerably larger contributions to individual retirement accounts. If you are just starting on your working career, you had better plan to save for your retirement and not count too heavily on political schemes. Since this will be a very long-term undertaking, it would make sense to open an IRA with a firmly established and well-managed financial institution that has a good investment record. ■

Ashby Bladen is senior vice president for investments of the Phoenix Mutual Life Insurance Co. and author of How to Cope with the Developing Financial Crisis.

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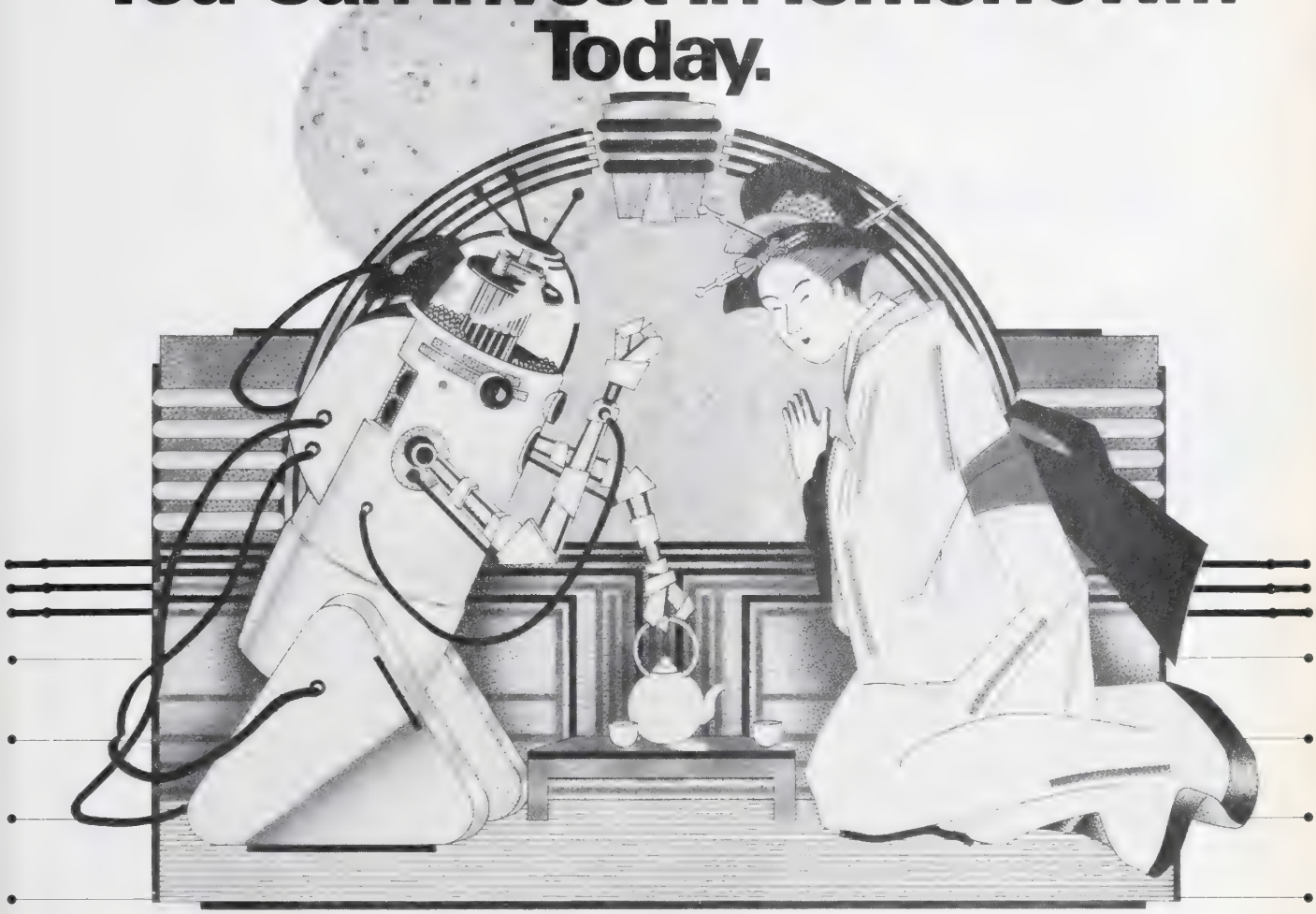

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HARDER THAN IT LOOKS

By Stephen E. Roulac

Did you ever wonder why investors who succeed in real estate seem to outstrip the less successful ones by incredibly wide margins? There's no simple explanation for this divergence, but something the mathematicians call game theory provides an important clue.

All games involve a combination of luck and skill. But which is more important? Is the outcome determined more by random events or by the participants' acts? Think about this, and you will quickly see that real estate investing and the stock market are very different.

The stock market offers: 1) easy access and efficient transaction execution; 2) frequent trading and instant price information; 3) willing buyers and sellers of virtually all securities; 4) reliable information and research; and 5) investment alternatives that are prepackaged and readily comparable.

The real estate market, on the other hand, reflects: 1) a cumbersome, time-consuming and inefficient transaction process; 2) infrequent trading and limited price information; 3) at times, an "incomplete" market, with an imbalance of buyers and sellers; 4) limited reliable information and little objective research; and 5) diverse, often complex, investment options, requiring legal and tax analysis.

The real estate market, then, tends to be what is known as an *inefficient* market. But the stock market is closer to what is known as an *efficient* market.

In an efficient market, few opportunities exist to identify undervalued or overvalued investments. Active buying and selling by knowledgeable participants pushes prices to a "normal" range. And since investment prices presumably reflect all future information, any investment can be considered to be "fairly" priced.

In an inefficient market, by contrast, transactions occur infrequently. Information is sketchy, and comparing one investment with another may be difficult. Thus, transactions in the inefficient market have a greater likelihood of occurring at prices outside the normal range.

Let's say, for example, that you want to buy shares in a company listed on the New York Stock Exchange. There's a wealth of information at your disposal—annual reports, 10K forms, research reports issued by brokerage houses, magazine and newspaper articles evaluating management. You can also find out who's buying and selling the stock, as well as trading volume and price history. In short, lots of people are actively analyzing your potential investment, its problems and its prospects.

Now, to balance your portfolio, you search for a real estate deal. Instead of independent, standardized financials, you will get what is known in the trade as a "setup." This is typically a one-page summary that describes the property and includes data about price, down payment, financing and income. Nearly always this information is optimistic—overstating rents and understating expenses. The bottom line: You are on your own as a potential real estate investor.

Because many real estate investors largely ignore comprehensive research, the level of information they and the market rely on is well below that normally available in the stock market. So it's no surprise that real estate prices on equivalent pieces of property vary dramatically. Lots of trades take place in the dark.

This is all in line with theory. Transaction prices and "normal" values are very close in an efficient market. But in an inefficient market there is a larger divergence. What this means is that both the payoffs for superior performance and the penalties for miscalculation are greater in inefficient markets.

Now think about real estate and why it can make a few people very rich. For most individuals and even corporations, significant leasing or sale of real estate occurs once every several years. In one week, however, the real estate professional sees more transactions than many of those on the other side of the table experience in a lifetime. Consequently, one side of many trades is much more knowledgeable than the other. This creates ideal conditions for the pro to gain at the expense of the amateur.

If you are one of the pros, you already know how the inefficient real estate market works to your advantage. If, on the other hand, you are an amateur dealing with another amateur, then luck may be as important as skill in determining the outcome. But if you are an amateur with a pro across the table, odds are that skill will win out; your loss will be his gain. Repeat this often enough, and he can get very rich.

Now take a lesson from the pros. Because of the comparatively inefficient nature of real estate markets, how you evaluate specific investment opportunities becomes very important. This means astute investors seeking extraordinary yields devote extraordinary resources to their task. By contrast, novices who devote minimal resources to real estate analysis not only diminish their prospects for success but also create opportunities for others. ■

Stephen E. Roulac is chairman of National Management Advisory Services, a division of Kenneth Leventhal & Co., a national CPA firm specializing in real estate and financial services.

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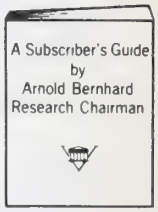

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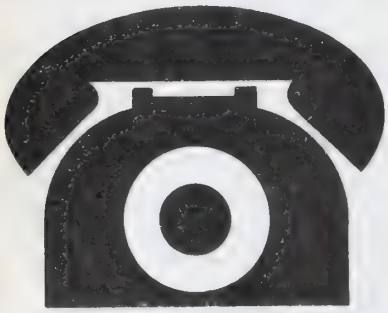

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Financial Strategy

While inflation raged and negative real interest rates prevailed, you were nuts not to buy. But the world has changed.

RENT! DON'T BUY!

By A. Gary Shilling

Housing markets are heating up again, especially in the affluent suburbs. With memories of the last real estate boom still fresh and with mortgage rates still declining, a good many people are understandably beginning to think that the time to buy a house is now, before prices once again rise out of sight. They should think again.

The thrill of owning tangible assets—particularly real estate—is gone, since their appreciation no longer vastly exceeds interest rates. Quite the reverse. Inflation in general and the price appreciation of tangibles in particular are likely to stay at low levels. Compared with inflation, interest rates may remain unusually high. The only sensible conclusion to be drawn is: Rent, don't buy.

Only yesterday, when inflation raged and negative real interest rates prevailed, you were nuts not to buy. However dramatically the cash costs of home ownership rose, the appreciation on the investment kept up easily. So aftertax costs of owning a house remained low—lower, in fact, than renting equivalent space. As usual, rental rates lagged behind cost acceleration. Speculators flooded the market with rentals by buying up houses they didn't occupy.

But the rules that worked so beautifully in the Seventies no longer apply. Appreciation on housing started to peter out in 1980. By 1981 renting was cheaper than buying, even after taxes.

Sure, rents will probably rise faster than home ownership costs, as they catch up in the next few years. Even so, renting will remain the better deal. You might be better off renting that Florida condo than buying it. Advise your children who are leaving home to rent rather than buy, particularly if they are in a low tax bracket. In your role as corporate manager, you might encourage transferees to rent, not buy, homes in their new locales.

You may even find that it makes sense to sell your own house and rent, even if you end up paying substantial capital gains taxes. Pride of ownership may win out over cold logic, but simple arithmetic makes a startlingly convincing case.

Suppose you own a $300,000 house. Let's assume that, from here on out, the house will appreciate about in line with general inflation, say 4% a year. (The inflation rate may be lower than that, if my firm's forecast is correct, but let's be conservative.) If, from that appreciation, we subtract normal property taxes after the federal tax deduction, maintenance and utility and insurance costs, owning that $300,000 house costs you about $5,000 a year.

What happens if you sell that house? Suppose you have $200,000 cumulative capital gains on all the residences you have owned over the years. That's a lot of appreciation. But if you sell the house and pay the maximum 20% capital gains tax, you still have $260,000 left. If you

A. Gary Shilling, a guest columnist, is president of A. Gary Shilling & Co., Inc., a New York economic consulting firm. He is author of Is Inflation Ending? Are You Ready?, *just published by McGraw-Hill*

invest this in municipal bonds at a 9% return, your tax-free income will be $23,400 annually. You are even better off if you are over 55; you have a one-time capital gains exclusion of $125,000.

If your kids have already left home, you probably don't need a house this big, but let's be conservative again and assume that you rent another big $300,000 house at a rent equal to 8% of the value. That may sound like a low return for the owner, but it's really at the high end for houses in that price range. This rental cost of $24,000 a year slightly exceeds the interest return on your municipal bonds but still leaves you $4,400 better off than earlier, when you owned that $300,000 house. If a $200,000 house, without those 6 bedrooms and 4½ baths, suits your needs, you will be ahead by over $12,000 per year. Not bad.

You don't have to invest your extra money only in municipal bonds, of course. You could consider investment in—you guessed it—rental property. This only seems contradictory. It's not. Here I am looking at the tax-shelter benefits and at prospects for a faster rise in rental rates. I am not talking about investment for appreciation. If you bought another $300,000 house on a leveraged tax-shelter basis, put your remaining cash in municipals and rented the house for 8% of its value, your annual aftertax income would average about $25,000. This is about $1,000 more than the rental you would be paying on your $300,000 house. Compared with occupying the house you previously owned, you would be about $6,000 per year ahead of the game. If a $200,000 house or apartment suited your current lifestyle, you would be $14,000 better off per year.

All this may sound ridiculous in light of what we lived through in the 1970s, but there it is. Low real estate appreciation and high real interest rates have reversed the rules of the game. It can even make sense for you and a good friend in similar circumstances to dump your present abodes, then buy houses that you rent to each other. Incidentally, I have this lovely house in Short Hills, N.J., in cream-puff condition, on three-quarters of an acre, with. . . . ■

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The illustrated 8½ x 11 inch "New Product/New Business Digest" contains over 60 pages and includes complete names and addresses for direct follow-up. The 1983 Annual Edition is $59.00/copy ($75.00/copy overseas). Only prepaid orders are accepted. NY State residents add sales tax.

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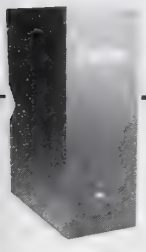

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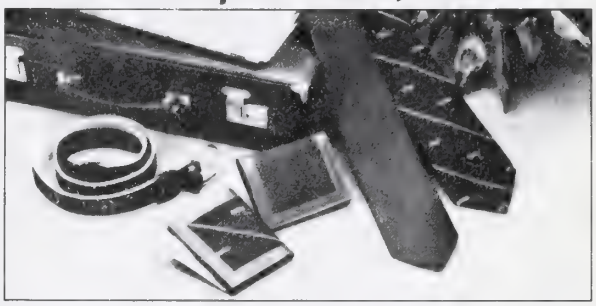

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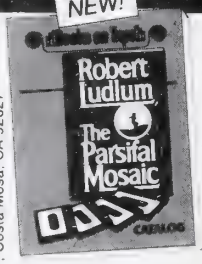

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GAME-A-TRON INC. O

NEW BRITAIN, CT., March 24—According to Dominic Sanzo, Chairman, three of Game-A-Trons electronic video slot machines were installed in the Frontier Hotel and Casino on the Las Vegas "Strip" for field testing on March 22. All three were Five Card Stud Poker machines. Such field testing is a prerequisite to obtain approval for marketing the machines in Nevada.

Sanzo said that Game-A-Tron will complete and resubmit their application for the Nevada manufacturers/distributors and slot route operators licenses by early April. Game-A-Tron is not currently licensed in Nevada. There is no assurance their application will be approved. Sanzo indicated that if they are successful in obtaining a Nevada license it is highly probable that they would also apply for licensing in Atlantic City.

Game-A-Tron recently retained the services of an independent consultant in the electronic video slot machine industry for evaluation of their machines. His report was very favorable in comparison with competitive machines. His areas of evaluation included graphics, electronics and product reliability.

Game-A-Tron will submit field testing requests for additional machines at the May meeting of the Nevada State Control Board. Among these requests will be one for the Draw Poker machine. According to Game-A-Tron's legal counsel in Nevada a field testing permit for the Blackjack machine was recently approved by the board. No actual field testing has begun at this time.

Game-A-Tron is currently in the early stages of developing a video game home cartridge capability. Sanzo stated that Game-A-Tron has produced a prototype cartridge that is electronically compatible with Coleco cartridges. Coleco is one of the acknowledged leaders in the video cartidge industry.

The Board of Directors is contemplating various methods of raising additional capital to assist the company in achieving its goals. The company has several possible approaches under consideration including a rights offerings to shareholders. Major uses of capital would be for expanding product lines and marketing.

Preliminary "feelers" were put out to Game-A-Tron by another company in the gaming machine industry regarding the possibility of a merger. These talks were exploratory in nature and were inconclusive. There were no definite offers or proposals. The talks were terminated as not in the best interest of the company or its shareholders. No future discussions are contemplated with that company.

Game-A-Tron is traded on NASDAQ with the symbol "GAME" the company was taken public in 1980 by Neidiger, Tucker, and Bruner offering 10 million shares at 25 cents a share.

(Financial Contact: E.W. Steele, c/o Game-A-Tron Inc., 45 Osgood Ave., New Britain, CT 06053. Phone: (203) 223-2760).

GEARHART INDUSTRIES, INC. N

FT. WORTH, TX., Mar. 22—Gearhart Industries, Inc. today announced net operating results for the year and fourth quarter ended January 31, 1983.

The results of operations for the year ended January 31, 1983 and the corresponding prior year are as follows:

	Year Ended Jan. 31		Qtr. Ended Jan. 31	
	1983(a)	1982	1983(a)	1982
Net revenue	$345,030,000	$344,758,000	$90,700,000	$92,711,000
Net income	15,960,000	31,647,000	6,422,000	8,213,000
Average common & Common equivalent shares outstanding	15,538,000	15,443,000	15,811,000	15,433,000
Earnings per share	$1.03	$2.05	$.34	$.53

(a) Reflects the adoption of the new accounting change for foreign currency translation (FAS No 52)

Operating results for both the year and quarter ended Janaury 31, 1983 were substantially below the prior year level reflecting the sharp decline in U.S. drilling activity and intense competitive conditions. Foreign drilling activities, which during the year helped partially offset the deterioration of the domestic market, are now beginning to be affected by the increased competition and softened demand.

The company worked throughout the year implementing selective cost reduction programs. These cost reduction programs were initiated to balance operating levels and costs with the depressed drilling activities and yet not jeopardize any essential long-term growth projects.

As compared to the previous quarter, the fourth quarter reflects increased Canadian activity and a high level of foreign equipment sales.

Gearhart Industries, Inc., headquartered in Fort Worth, Texas, is a high technology company that performs wireline and other well evaluation services for the oil and gas exploration and production industry. The company also manufactures wireline equipment and supplies both for its own use and sale to independent wireline service companies.

(Contact: Wayne Banks, Sr. Vice President-Finance, Gearhart Industries, Inc., P.O. Box 1936, Fort Worth, TX 76101. Phone: (817) 293-1300.)

POLICY MANAGEMENT SYSTEMS CORPORATION O

Columbia, S.C., April 7—Policy Management Systems (PMS) Corporation (OTC:PMSC) announced that for its first quarter, 1983, earnings per share were at a record level—$.28 for the quarter. This was an increase of 40%. Total revenues for the quarter ended March 31, 1983, were $13,817,000, up 40% from $9,850,000 in 1982. Operating income was $2,675,000 versus $1,913,000 for the same quarter of 1982. Net income was $2,064,000,up from $1,470,000 in 1982.

Headquartered in Columbia, S.C., PMSC is the largest provider of standardized software products and services to the worldwide property and casualty insurance industry.

For more information or a copy of the Annual Report:

(Contact: Robert Gresham, Vice President and Treasurer, PMSC, P.O.Box 10, Columbia, S.C. 29202. Phone: (803) 748-2405.)

PRAIRIE PRODUCING COMPANY N

PRAIRIE PRODUCING CO LISTED ON N Y STOCK EXCHANGE

Houston, Texas—Prairie Producing Company, an oil and gas exploration, development, and production company in Houston, Texas, has listed on the New York Stock Exchange. Trading commenced on April 5th 1983, under the symbol "PRP". Previously, the Company's shares were traded in the OTC market.

Mr. L.B. Forney, President and Chief Operating Officer, stated that listing on the NYSE, "is an important step in the growth of Prairie. It should generate new interest and provide us with broader recognition within the investment community. We are indeed pleased to join this list of other quality companies."

Separately, the Company also reported gross revenues for the fiscal year ended 12-31-82 of $25,569,715 compared to $30,061,398 for the same period of 1981. Net income was $5,258,732 ($.66 per share) for 1982, versus $6,757,789 ($.88 per share—restated) for 1981. Working capital generated from operations and available for capital expenditures was $17,300,907 for 1982 compared to $21,521,419 for 1981.

Production during 1983 totalled 298,166 barrels of oil and 4,301 million cubic feet of gas. The successful exploration and acquisition program not only replaced reserves produced during the year, but at year-end 1982 proved developed reserves, as estimated by the Company's independent reserve engineers, were 50% higher than at year-end 1981.

Mr. Forney stated that the decline in revenues and earnings was due primarily to a lower domestic demand for natural gas and secondarily to delays experienced in connecting new production to gas buyers' pipelines. Mr. Forney also said that domestic gas demand should improve as the economy recovers, and further that production should increase as the Company's newly discovered reserves are placed on stream.

(Contact: Gates G. Brelsford, Manager-Corporate Affairs, Prairie Producing Company 2200 Houston Natural Gas Bldg. Houston, Tx. 77002 or phone (713) 658-8413.)

TELECOM PLUS INTERNATIONAL, INC.

Long Island City, N.Y., Mar. 29—Telecom Plus Internationa Inc. (NASDAQ: TELE) today reported record sales and earn ings for the year ended December 31, 1982.

Sales rose 56% to $65,212,253 vs $41,698,746 in 198 Pre-tax earnings for the period increased 84% $9,920,995 as compared to $5,400,073. Net earnings ros 87% to $4,813,695 or $.73 per share vs $2,569,673 or $.5 per share. There were 6,565,300 weighted average share outstanding in 1982 versus 4,432,007 in 1981.

For the fourth quarter, sales increased 66% $20,082,638 as compared to $12,071,270. Pre-tax earning rose 65% to $2,861,513 versus $1,735,876 for the simil period last year. Net earnings were up 69% to $1,471,413 $.21 per share compared to $870,876 or $.17 per share f the fourth quarter of 1981. There were 6,858,047 weighte average shares outstanding for the period as compared 5,033,468 for the same period in 1981.

Telecom Plus International, Inc. is one of the country largest independent telecommunications companies wi major activities in the interconnect business telephone fie and in microwave data transmission.

(Contact: Kathleen McCollough, Director-Marketing Com munications, Telecom Plus International, Inc., Teleco Building, 48-40 34th Street, Long Island City, NY 1110 Phone (212) 392-7700.)

UNITED TELECOMMUNICATIONS, INC.

Kansas City, Mo.—United Telecommunications, Inc. ear ings per share for the first quarter of 1983 were 64 cent compared to 64 cents in 1982, Chairman Paul H. Hens announced today.

For the 12 months ended March 31, 1983, earnings p share were $2.49 compared to $2.50 for the 12 mont ended March 31, 1982.

Henson said United Telecom's business growth accele ated in the first quarter but continued to lag behi historical growth patterns. Total revenues and sales for t quarter were $630 million, up 6 percent from $592 million 1982. For the 12 months ended March 31, 1983, tot revenues and sales were $2.5 billion.

Henson noted that while United Telecom's net incom was up 6 percent in the period, a 7 percent increase in t number of shares outstanding limited earnings per sha growth. The number of shares outstanding increased b cause of acquisitions, the company's dividend reinvestme plan, and employee stock purchases.

"We are experiencing a gradual strengthening in most of o major markets," Henson said. "If the present trend continue we expect to report progressively stronger quarterly earnin throughout the remainder of the year," he said.

UNITED TELECOMMUNICATIONS, INC.
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(Thousands of Dollars)

	Three Months Ended March 31,	
	1983	1982
Revenues and Sales.		
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United Communications Systems	110,275	111,3
United Telecom Computer Group	37,520	38,2
United Telecom Communications	5,491	4,9
Inter-Company Sales	(5,598)	(3,97
	$629,640	$591,5
Net Income	$54,059	$50,9
Preferred Stock Dividends	1,173	1,2
Earnings Applicable to Common Stock	$52,886	$49,6
Earnings per Share.		
Assuming no dilution	64¢	6
Assuming full dilution	62¢	6
Average Number of Common Shares	83,036,000	77,604,0

(Contact: Don Forsythe, United Telecommunications, In P.O. Box 11315 Plaza Station, Kansas City, Mo. 6411 Phone (913) 676-3343.)

(For information on advertising in Corporate Report Updates, call Sarah Madison (212) 620-2371)

Flashbacks

"The more things change. . . ." Items from past issues of FORBES

Edited by Dero A. Saunders

Studebaker 1923 Big Six seven-passenger touring car

Sixty years ago in FORBES

(From the issue of May 12, 1923)

"The cost of living in the U.S. on Mar. 15 was 59.2% higher than in July 1914, according to the National Industrial Conference Board. This, it was explained, represents an increase of one-half of 1% since November 1922, brought about by a continued rise in clothing prices, higher rents, and an increase in the cost of sundries. Average money wages, it is figured, are now 105% above the pre-war level, and average real wages . . . are 30% above the pre-war figure."

"Bankers are so conservative that would you believe that many of them throughout the country, particularly in the smaller places, are only now admitting to themselves that the automobile industry is dependable, fundamental, permanent? . . . Until recently, however, even the strongest of automobile manufacturing companies have encountered difficulty in placing their paper with nonmetropolitan bankers. I was astounded, while visiting recently a town of rather moderate size, to learn from one of its most progressive bankers that he had always turned down automobile paper until a few months ago. When I asked him why he had exercised such discrimination against this type of security, his reply revealed that he had never troubled to investigate the financial soundness and stability of the industry. . . . Once he did make such an investigation, he was thoroughly converted and is sorry he was so tardy in 'wakening up,' as he called it."

President Raymond Redheffer of Amalgamated Bank, New York's first labor bank

"The livest spot in the U.S. today, from all accounts, is Los Angeles and surrounding territory. Nowhere else are real estate values rising so sensationally. The city is attracting people from all parts of the country. Its business is expanding enormously. The city, in fact, is becoming a very important manufacturing center. The most stimulating factor of all, however, lately has been extraordinary expansion in the discovery and development of oil properties. . . . Read this extract from a private letter written, not for publication, by a well-known San Franciscan:

" 'Enormous fortunes have been and are being made out here in oil. You can hardly realize how many absolutely brainless, mediocre "slobs" have made anywhere from $1 million to $20 million in oil in the last year. California is producing daily about 750,000 barrels of oil. . . . Sixty percent of the oil in the U.S. is now being produced in California, and I expect to see 1 million barrels per day production. The oil pools around Los Angeles are producing about $400 million per year. Do you wonder that Los Angeles is prosperous?' "

Fifty years ago

(May 15, 1933)

"The American government's refusal to live up to its (gold) bond obligations arouses mixed, melancholy feelings. Foreign (as well as home) investors bought U.S. government bonds without suspecting for one instant that America would do anything such as is proposed. It was stipulated in the bond that holders would be paid in gold. The Administration announces that this contract will not be honored. Instead of receiving what they expected to receive, both foreign and domestic holders will be paid in paper currency quoted at a greatly depreciated price throughout the world. This action is hardly calculated to inspire American citizens with patriotic pride.

"Yet, just how much room have European owners of U.S. bonds to complain? Have not the principal nations of Europe told our government that they don't want to pay what they owe us? . . ."

Twenty-five years ago

(May 15, 1958)

"Nearly 50 years ago the elder Henry Ford revolutionized labor-management relations by raising his wage rates to $5 for an eight-hour day at a time when comparable plants were paying only $2.30 a day for the same work. It seemed to many hidebound employers of 1914 that Ford was committing economic suicide. Far from it. His decision was based on two very solid premises: 1) that higher wages would more than pay for themselves in higher productivity; and, 2) that a well-heeled working force would become industry's best customers.

"In subsequent years the elder Mr. Ford failed to keep up with the times, and the Ford Co. got itself embroiled in serious labor-management troubles. But the precedent Ford set with his $5 wage has since become a guiding principle of U.S. industry: the principle of cutting labor in on profits through higher wages."

"When the 2,850 shareholders of Rochester, N.Y.'s Haloid Co. voted last month to change the name to Haloid Xerox, Wall Street hardly batted an eyelash. Name changes are everyday events in business, and the financial community had long known that xerography, a patented electronic copying process, was an increasingly important part of the firm's business.

"But to Haloid's president, Joseph C. Wilson, 48, the change acknowledged much more than that. It was proud public vindication of a decision he had taken ten years before, which committed the little manufacturer of photographic paper to spend nearly as much as its annual gross—then about $7 million—to acquire and develop an electronic copying process which had never been used outside of the laboratories of the Battelle Memorial Institute."

Thoughts on the Business of Life

He who attracts luck carries with him the magnet of preparation.
WILLIAM A. WARD

There are no hard times for good ideas.
H. GORDON SELFRIDGE

What is new is not necessarily needed and what is old is not automatically obsolete.
HARRY G. MENDELSON

Nothing is so dangerous as being too modern. One is apt to grow old-fashioned quite suddenly.
OSCAR WILDE

What would life be if we had no courage to attempt anything?
VINCENT VAN GOGH

The world hates change, yet it is the only thing that has brought progress.
CHARLES F. KETTERING

Change is one thing, progress is another. "Change" is scientific, "progress" is ethical; change is indubitable, whereas progress is a matter of controversy.
BERTRAND RUSSELL

A conservative is a man who does not believe that anything should be done for the first time.
FRANK A. VANDERLIP

The greatest benefit that can be bestowed upon those who toil is skilled and wise management.
CALVIN COOLIDGE

A man may firmly bind himself to prosperity by the cord called timely action.
TIRUVALLUVAR

If you don't drive your business, you will be driven out of business. The man who stands still is passed by the procession. The prize is for the alert, for the enterprising, for the farsighted, for the energetic, for those quick to adapt themselves and their organization to new and changing conditions.
B.C. FORBES

Good business is bold in enterprise.
WILLIAM FEATHER

Once an organization loses its spirit of pioneering and rests on its early work, its progress stops.
THOMAS J. WATSON

Fortune brings in some boats that are not steered.
WILLIAM SHAKESPEARE

Long-term planning is an appropriate medium through which to abreact visions, especially visions about a happy, prosperous, better future.
WILLY LINDER

Planning is deciding what to change today so tomorrow will be different from yesterday.
ICHAK ADIZES

More than 3,000 "Thoughts," indexed by author and subject, are available in a 574-page book at $12.95. Send check and order to: Forbes Inc., 60 Fifth Ave., New York, N.Y. 10011. Add appropriate sales tax on New York State orders.

The world stands aside to let anyone pass who knows what he is doing.
DAVID STARR JORDAN

A hunch is creativity trying to tell you something.
FRANK CAPRA

Progress is what happens when impossibility yields to necessity.
ARNOLD GLASOW

We can't cross a bridge until we come to it; but I always like to lay down a pontoon ahead of time.
BERNARD BARUCH

There is danger in reckless change; but greater danger in blind conservatism.
HENRY GEORGE

A Text . . .

If any man's work abide which he hath built thereupon, he shall receive a reward.
I CORINTHIANS 3:14

Sent in by Raymond May, Salt Lake City, Utah. What's your favorite text? *The Forbes Scrapbook of Thoughts on the Business of Life* is presented to senders of texts used.

It appears that God's creative method is movement, change, continuing search, ongoing inquiry. Those who seek are rewarded. Those who are sure they already have the answers gradually become obsolete.
JOHN M. TEMPLETON

The only failure a man ought to fear is failure in cleaving to the purpose he sees to be best.
MARY ANN EVANS

FORBES
May 23, 1983

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767 simulator

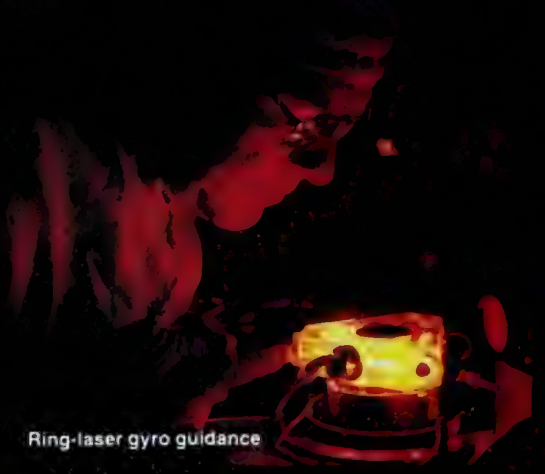
SIMULATION

Rising operating and capital costs, increased safety requirements, and the growing complexity of equipment and processes have stimulated higher demand for the sophisticated simulator training systems produced by Singer's two Link divisions.

The Link Flight Simulation Division's current activities include simulators for the new Boeing 757 and 767 commercial aircraft; the F-16 fighter; the B-52 strategic aircraft; C-130 transport; NASA's Space Shuttle; and a variety of military helicopters.

The Link Simulation Systems Division received its single largest power-plant simulator award in 1982, and is building a number of similar systems for other customers, including those in eight foreign nations. This Division is also addressing other industrial and military tactical areas where there are requirements for advanced operator training.

SimuFlite Training International, Inc. will begin its operations in training corporate pilots in early 1984. Growth of this field is being stimulated by active government support for simulator training, higher proficiency and safety standards, increased aircraft operating costs, and severe airport congestion.



Ring-laser gyro guidance

Space shuttle navigation

NAVIGATION/GUIDANCE

Singer's Kearfott Division is engaged in the full range of navigation and guidance systems – inertial, Doppler radar, stellar/inertial, and radio frequency.

In 1982, the Division was selected to produce the high-accuracy inertial navigation system for the B-1B aircraft. This system will employ technology that can be applied to future manned and unmanned aircraft.

Kearfott also delivered the first production prototype of its new-generation ring-laser gyro navigation system for customer testing and is developing a second-generation stellar/inertial guidance system for the Trident II missile. The Space Shuttle's primary inertial navigation system was developed and produced by Kearfott.

Kearfott is also developing JTIDS – the Joint Tactical Information Distribution System which links all elements of a tactical force with integrated navigation, communications, and data exchange functions that are secure and jam-resistant.

B-1B inertial na

Trident missile

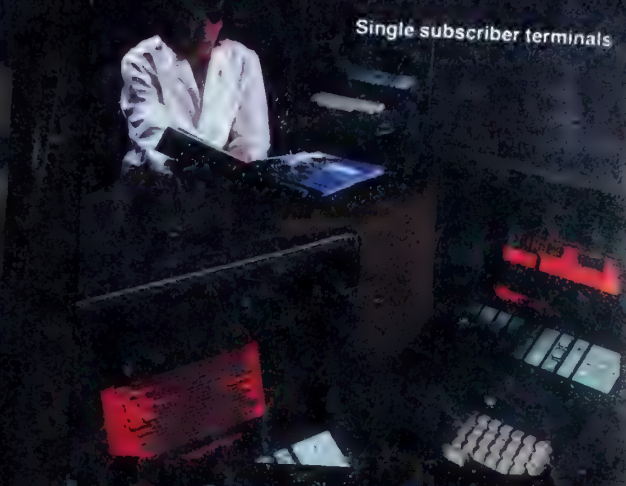
Tactical correlation system

ELECTRONIC WARFARE

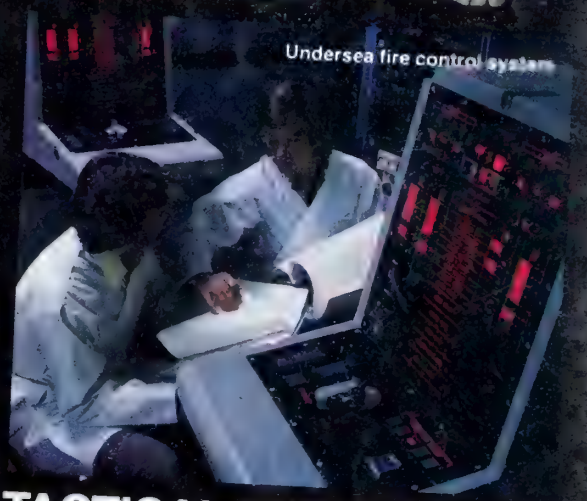
The HRB-Singer Division develops and produces specialized electronic warfare systems to accomplish signal interception, analysis, and interpretation.

In strategic applications, the Division's technologies help keep commanders abreast of changing strategic military situations worldwide to aid in long-range defense planning. In tactical situations, its systems provide information needed to make decisions regarding rapidly changing developments in the field.

HRB-Singer has developed data correlation systems that quickly process massive amounts of information for analysis and display. These systems employ sophisticated computer technology and a variety of graphic displays.



Single subscriber terminals



Undersea fire control system

TACTICAL INFORMATION AND CONTROL

The Librascope Division's systems are employed in virtually all U.S. Navy submarines, including Trident, to control tactical weapons such as the Mark 48 torpedo and Harpoon missile.

During 1982, Librascope's new contracts included an award to design and develop a prototype fire control system for the vertical launch of cruise missiles from submarines. The Division also continued to expand its international business with a contract to supply its Mark I all-digital fire control system for India's new submarine. Similar equipment is being installed in Canadian and Australian vessels.

Librascope is also engaged in a U.S. Army program to develop a highly intelligent communications processor, known as the single subscriber terminal, for use with tactical data systems. The Division's current Tactical Computer Systems and Terminals provide real-time, on-screen data for use in Army field operations.

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KLM's Business Class.

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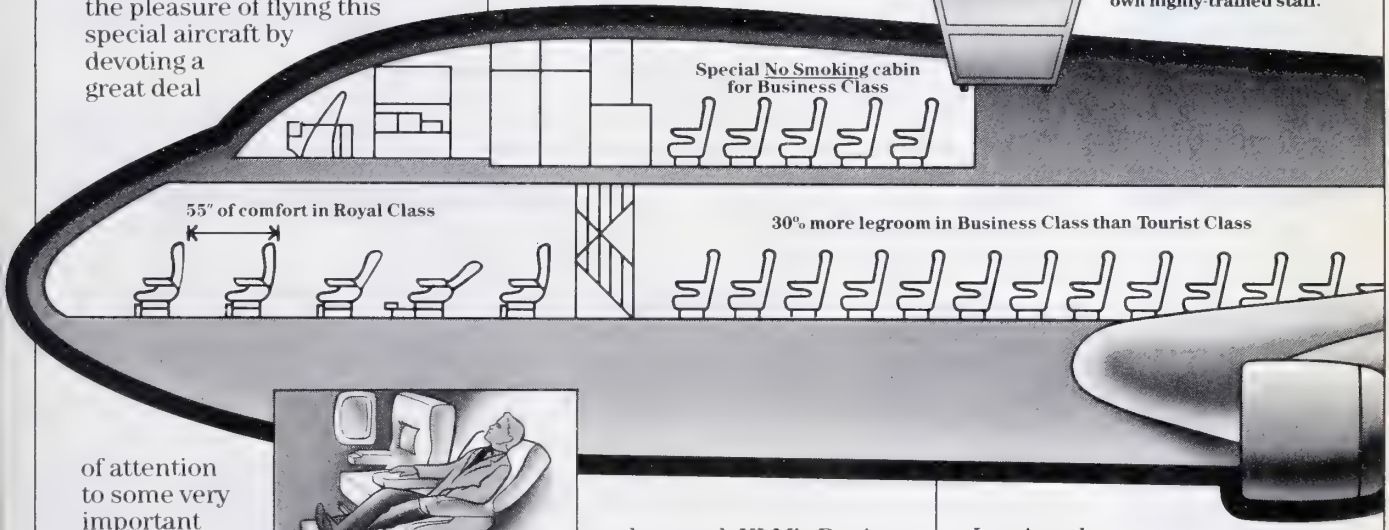

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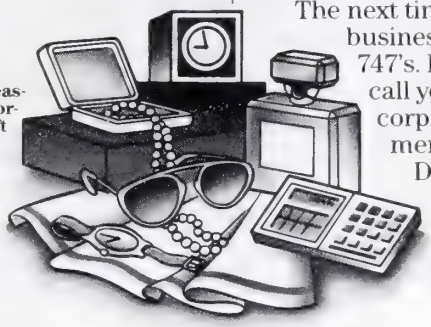

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May 23, 1983
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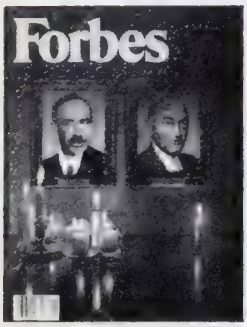

124 *Cover Story: "Fiscal measures have created and destroyed industries even where this was not their intent."*

30 *Bethlehem Steel: "We're planning to be a little bit smaller but a lot better."*

50 Maquiladoras: *Even the Japanese buy switches made in Mexico*

30 Companies:
Bethlehem Steel
This is not your routine basket case. It has a plan, and the courage to think smaller.

33 Railroads:
Confounding The Doomsayers
Can an industry successfully downsize? Consider the railroads.

35 U.S. Industry:
Coming Back Home
A surprising number of companies are closing down their foreign production and returning to the U.S.

36 Banking:
Let The States Do It
In interstate banking, they are.

40 Hollywood:
An Old Issue Revived
What's the difference between a movie theater and a cable into your TV set?

46 Companies:
Ames Department Stores
Keeping 'em on Main Street.

48 Companies:
American Agronomics
As usual, the investors hurt worst were the last ones in.

50 Mexico:
Viva Maquiladoras
At least one part of the Mexican economy is still thriving.

56 The Up & Comers:
Ennis Business Forms
You can go home again, as it turns out.

58 The Up & Comers:
Sensormatic Electronics Corp.
When you have dominated your market, one answer is to move downscale.

65 Oil:
Before You Say No . . .
Drilling funds may be better deals today than when they were hot.

66 The Streetwalker:
"When The Widows And Orphans Get In"
A few warning signs in a frothy market.

70 Companies:
Cluett, Peabody
The Arrow shirt, seemingly, goes on forever. So what's wrong with that?

74 Energy:
Breaks For The Big Boys
Some of the utilities' biggest customers are using some newfound muscle.

76 Technology:
Computer Boom Jobs
Computer camp counselor? Software talent agent? Believe it: They're real jobs.

86 Companies:
Philips Industries Inc.
Jesse Philips triumphs after retirement.

119 Numbers Game:
Is The Party Over?
A federal judge shakes up option-rich executives. Also: Multiemployer pension plans.

122 Taxing Matters:
Takeover Taxes
The price of acquisitions may be going up—retroactively.

124 Cover Story:
The 20th Century's Greatest Economist
It is not John Maynard Keynes, but his contemporary, Joseph A. Schumpeter.

134 Companies:
Anchor Hocking
There isn't much point in $900 million in sales unless you're making money on it.

135 Companies:
Eagle Clothes
Here's a nice trick, if you can do it.

139 Companies:
Deluxe Check Printers
Who's afraid of the checkless society? Eugene Olson never was. But now. . . .

140 Companies:
Novo Industri
A Danish company takes on Eli Lilly.

70 *Cluett, Peabody: "It was a turnaround we didn't turn around."*

119 *The Numbers Game: A "bombshell" with shrapnel that insiders should be aware of.*

135 *Eagle Clothes: In and out of Chapter 11, with a happy ending.*

158 *Profiles: "There's nothing like nepotism—provided your relatives are smart."*

142 Oil:
Can This Marriage Last?
The Aramco partnership looks a little shaky.

158 Profiles:
Jerry Speyer
Real estate developer Robert Tishman has an ace up his sleeve—his son-in-law.

Faces Behind The Figures

164 Eugene Smith,
Farmer
164 Don Kopka,
Ford Motor Co.
166 John Eberts,
Goldcrest Films
166 Henry Jarecki,
Mocatta Metals Corp.
167 Robert Rauschenberg,
Artist

168 Personal Affairs:
The Resurgence Of Polo
Will the last of the blueblood sports follow tennis into mass popularity via TV and shrewd promotion? Also: Newest fringe benefit—paternity leave.

176 On The Docket:
IBM Versus Europe
Some people think the European Economic Community's antitrust case against IBM will collapse, just like the U.S. Justice Department's. But there's a joker in the deck: world politics.

182 The Funds:
Playing Catch-up Ball
Funds that invest in stocks outside the U.S. missed much of the rally. Is the rest of the world about to catch up?

184 Statistical Spotlight:
The Service Stocks
Granted, the rise of the service industry is history in the making. But how's an investor to play history? Here are some candidates.

186 Investments:
Creeping Respectability
Is investment guru Douglas Casey taking on establishment tendencies?

188 Investments:
Tell Me When To Sell
Lots of people will oblige you with systems that sound great. Unfortunately, none of them seems to work.

Money And Investments

25
What's Ahead For Business
26
The Forbes Index
179
The Forbes/Wilshire 5000 Review

Columnists

191
Ben Weberman
192
Ann C. Brown
193
Srully Blotnick
194
Ashby Bladen
196
Stanley W. Angrist
198
Thomas P. Murphy
199
A. Gary Shilling
200
David Dreman

Departments

4
Side Lines
8
Trends
12
Follow-Through
14
Readers Say
17
Fact and Comment
20
Other Comments
23
Fact and Comment II
203
Flashbacks
204
Thoughts

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Side Lines

John Maynard Keynes, 1883-1946; Joseph Schumpeter, 1883-1950

We owe the cover story in this issue to a lucky break. In March our Steve Forbes and Laury Minard were breakfasting in London with the distinguished Austrian economist Frederik von Hayek, when Hayek mentioned in passing that 1983 was the centenary year both of John Maynard Keynes and of Joseph Schumpeter. The first almost a household name today, the other known chiefly to a minority of intellectuals and to professional economists. Keynes, whose economic ideas, vulgarized by politicians and hacks, have given us stagflation. Schumpeter, whose economic thinking was both broader and deeper than Keynes, but which—alas—has been ignored by politicians and policymakers. This was a centenary FORBES could not permit to go unnoticed. I put through a call to Peter Drucker in Claremont, Calif. Would he do an article for us contrasting these economic giants, both born in 1883? Why Peter Drucker? Because of his graceful style and ability to deal with grand concepts without losing sight of the real world. But when I called him, Drucker, much in demand as a teacher, writer, lecturer, consultant, was skeptical. He had many commitments. It was a big undertaking. But he would think it over. I was to call next day.

"You gave me a sleepless night," Drucker said on the second telephone call. He had been up late rereading his Schumpeter. It had been quite an experience. Keynes was wrong. Schumpeter was right. Yes, Drucker would do the article for us. It begins on page 124. I hope our readers will be as excited and elated by it as I was. On subsequent pages Contributing Editor Norman Gall and I add additional insights on Joseph Schumpeter—a prophet of limited renown in his own time but with a great message for us and our children and grandchildren.

Joseph Who?

Nothing better demonstrates the obscurity into which this great thinker has fallen than the difficulty our art department had in obtaining good illustrations for the article. The standard photo agencies were of no help—with them it was "Schumpeter Who?" Nor does he have any heirs or survivors that we could call upon for help. But we did locate old friends, students and colleagues of the economist, many of them men in their 80s. For the caricature that appears on page 130 we are beholden to Gottfried Haberler, the distinguished economist who, long retired from Harvard, is now a fellow at Washington's American Enterprise Institute. Also most helpful was another distinguished octogenarian, Redvers Opie, a close friend of Schumpeter who now resides in Mexico City. The group photo on page 131 is especially interesting. It was lent to us by Professor Loring Allen of the University of Missouri. Dr. Allen is writing a biography of Schumpeter and assisted us in many ways. We look forward to the appearance of his bio. It will be a landmark in reviving interest in the teachings of a man who has a great deal to say to our confused modern world.

Joseph and Elizabeth Schumpeter

James W. Michaels
Editor

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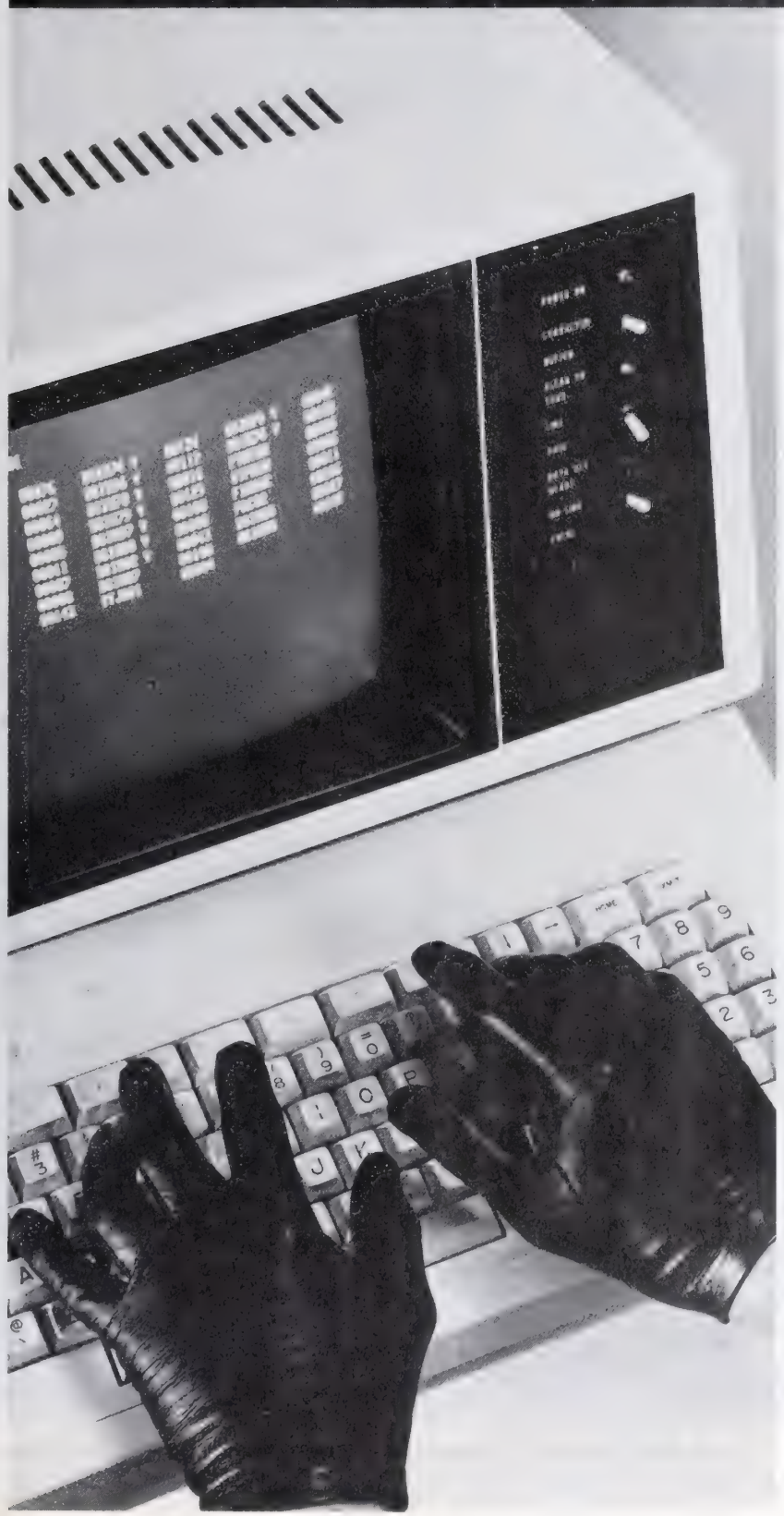

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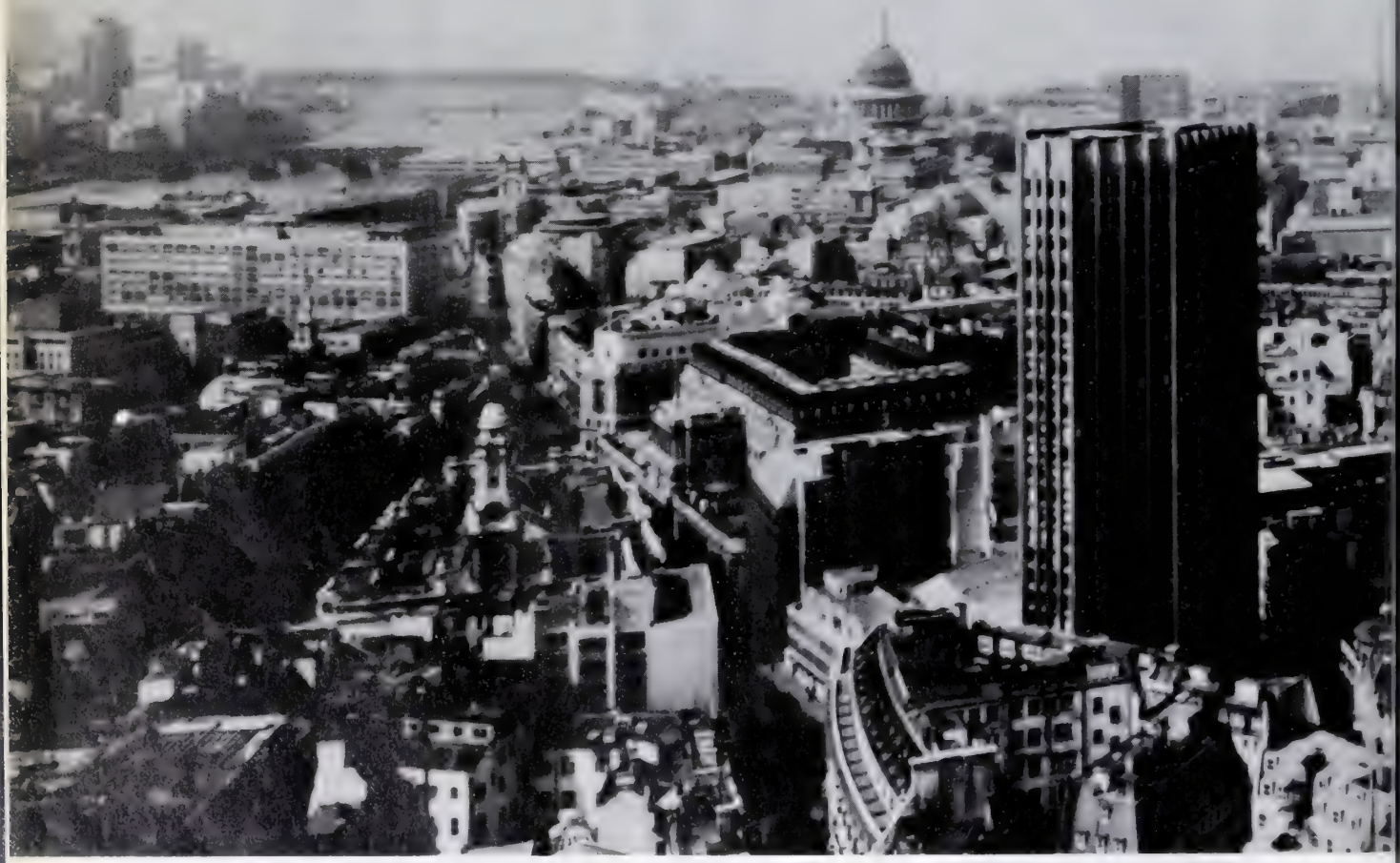

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Trends

Edited by John A. Conway

Pyrrhic victory

The banks that lobbied so hard to repeal 10% withholding on dividends and interest might now want to start fighting their own Senate-passed relief bill (which puts off withholding for four years). In the House Ways & Means Committee, Chairman Dan Rostenkowski (D–Ill.), who is in no hurry for repeal, may drag out his hearings right up to July 1, startup date for the withholding law now on the books. (He has set hearings on the relief measure for June.) Should Rostenkowski stall until the law takes effect, all concerned may decide to forget the whole thing. The rub is that banks are just learning that relief may be worse than the original law. Hidden in the compromise relief bill is a diktat that would have the IRS compile a running list of all taxpayers with a gap of $50 or more between actual and reported dividends and interest. That means every bank, S&L, broker and corporation would have to keep its records up to date and hold back 20% on delinquents' payments (up from 10% in the original legislation) at the IRS' stipulation. The additional paperwork would pose a much bigger burden than the withholding. Moreover, under the relief bill, financial institutions could not use the 30-day float to help defray the record-keeping costs. Some relief.

Ars gratia artis

Some pricey items seem recession-proof. High-priced, table-size art books, for example, kept moving briskly last year while sales of adult trade hardbacks fell 8.2%, the worst drop in ten years. Abbeville Press, a major art house, had its best year, says publisher Robert E. Abrams. "Trade sales increased only 10%, but that was off a terrific 1981, when they were up 35%." At Harry N. Abrams Inc., a Times/Mirror subsidiary, publisher Paul Gottlieb says sales were off a bit, but only because 1981 was a record year. The trend seems here to stay. Three years ago the bookstore at New York's Metropolitan Museum of Art expanded its 500 to 1,000 titles to 9,000. The result? "On Sunday, the big museum day," says Marilyn Jensen, the bookstore's trade buyer, "you can't breathe." Who buys these books? The mink-coat and tourist crowd is the mainstay. More surprising are art students and aficionados. "Many people, especially students, are passionate about these books," says Elsa Lichtenstein, manager of a Barnes & Noble bookstore in Manhattan. "If they want one badly enough, they buy it, despite the price." And the price is high. *Alfred Stieglitz*, a Callaway collection of the pioneer photographer's work, has sold 25,000 hard and 7,000 soft copies since November—at $75 and $35 apiece. And the best is yet to come. This year Abbeville is putting out a four-volume set of full-size reproductions of James Audubon's *Birds of America*. Price: $5,500 a set.

Audubon's pelican
Four for $5,500.

The M.B.A. woman

How does the M.B.A. woman see her future? To find out, Jane Borns and Sharon McCarthy, two graduate students at Cornell's School of Business and Public Administration, polled their peers. (Close to half replied.) First surprise was the peak salary expected. For men, this was a mean of $169,020; for women, $115,517. The men with low expectations were heading for public service jobs or didn't consider salaries important; women's hopes depended on which area of business they were aiming at, how long they had worked before getting an M.B.A. and whether they planned to keep working. In the class of '83, 69% of the women did not expect to stay at their desks, including those who planned absence only for maternity leave. They also admitted that the breaks in service would mean significantly lower salaries. (The finding was supported by similar research done at the Harvard Business School in 1973.) Researchers Borns and McCarthy hoped their class would not duplicate results of a sampling of Stanford M.B.A.s a decade ago. After those graduates had worked four years, salaries were similar, but the men had all the bonuses and other perks. And when asked to predict peak salaries, the gap between men and women had gone from 40% to 60%.

Now, real estate IRAs

Mutual funds may have garnered most of the new IRA money so far—some $5.8 billion at last count—but if real estate syndicators have their way, that won't be the case for long. A good many, including Bache and Merrill Lynch, are scrambling to come up with real estate income funds to attract future retirees' dollars. Tax shelter expert Robert Stanger, publisher of *The Stanger Report*, says syndicators and brokerage firms sold about $800 million of such programs last year—about one-third the total amount raised in the publicly registered real estate programs. Non-IRA investors are also going into the funds. Since IRAs aren't taxed until retirement, investors don't need writeoffs now, so most of the new IRA realty programs are unleveraged. The IRAs' funds go into everything from existing apartment complexes and shopping malls to future developments, and investors get any tax-free accumulations of cash flow and capital gains. They are not risk-free, of course, but that hasn't stopped investors yet. Estimates are that they could pump another $1.6 billion into the new realty income funds this year.

The protection argument

American opinion leaders oppose protectionist trade policies, according to a new survey sponsored by LTV Corp. and conducted by Princeton's Opinion Research Corp. Despite their bleak appraisal of the U.S. trade position, 67% of the 505 business executives, journalists, government officials, public interest spokesmen, professors and labor leaders polled feel U.S. trade policies should either be less protectionist or remain as they are. But labor leaders as a group contrasted sharply; 69% of them called for more protection. And another Opinion Research poll showed the same proportion of the general public favoring some import restrictions, with 87% thinking that imports contributed to unemployment. Among the opinion leaders polled, 62% said U.S. products were weak on world markets and 57% foresaw no changes in trade policies of foreign nations. Three-quarters felt that the Japanese had unfair trade policies, but a majority thought the U.S., West Germany and Great Britain to be moderately fair. Most agreed, however, that more protectionist U.S. policies would only

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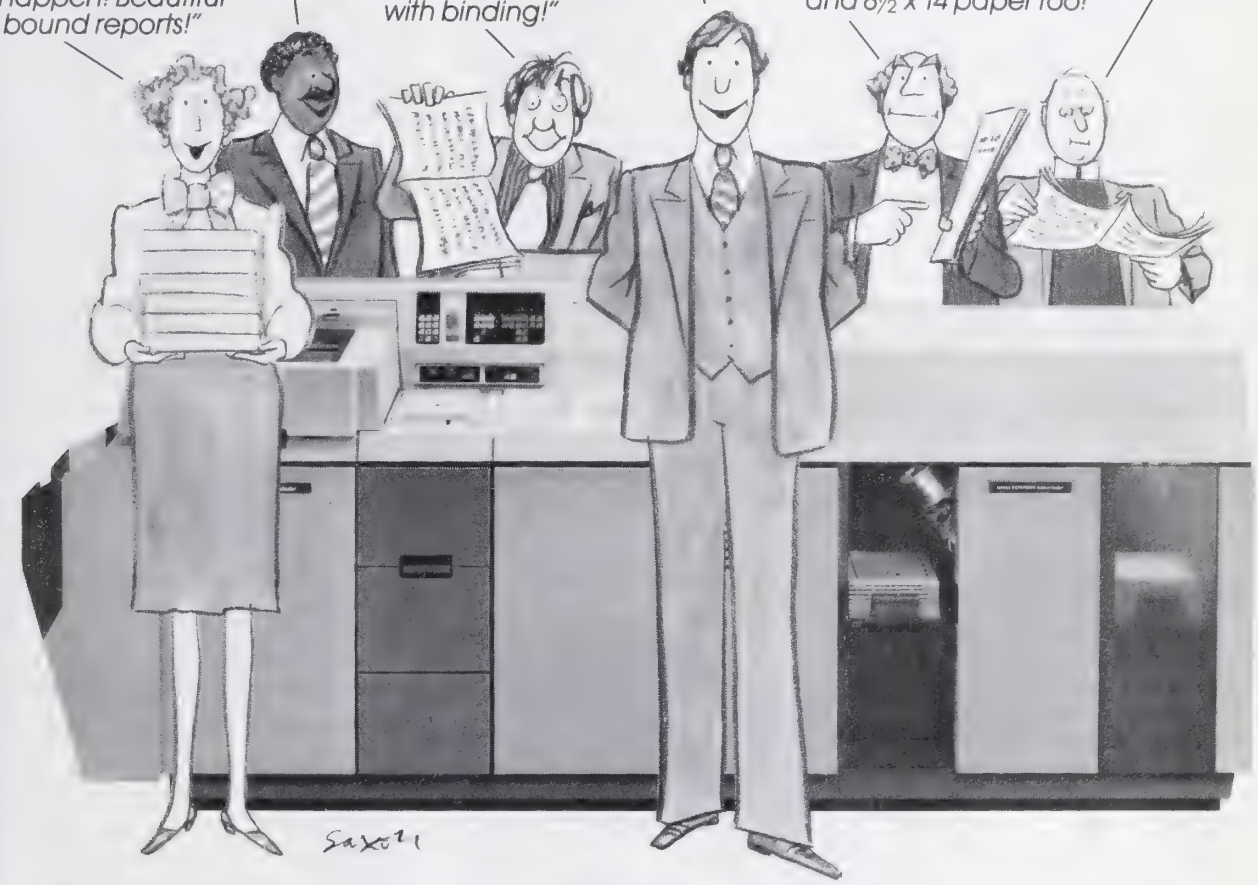

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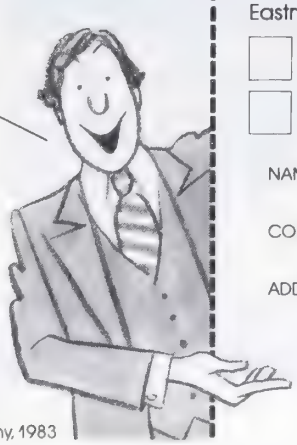

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cause high prices, foreign retaliation or a possible allout trade war. Increased U.S. protectionism, 43% said, would increase unemployment; only 29% thought it would increase U.S. productivity; and 88% called for more pressure on foreign governments to open their markets to imports.

Pay and performance

The captains of industry didn't do as well in 1982 as in prior years, but they didn't do badly either. Median salary for chief executives hit $616,000 last year, up 5.4% but well below the median raise of 13% paid in 1981, according to a survey of 35 of the top 100 industrial companies by Towers, Perrin, Forster & Crosby, the New York consultants. Five of the firms covered had net losses in 1982; pay for their chief executives fell by more than 28%. Poor financial results also eliminated bonuses in seven companies, according to Gordon Wolf, who ran the survey. "Executives' pay," he says, "clearly is not insulated from company performance."

You can't win department

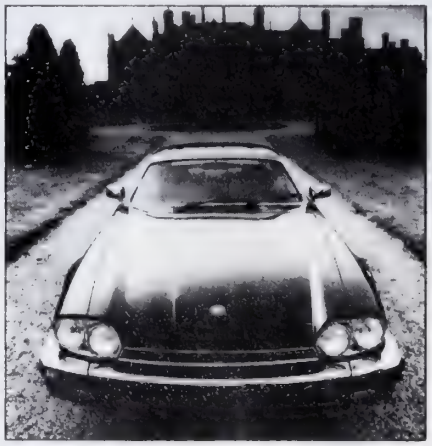
Despite a continuing barrage of flak from feminist groups, *Playboy* gave another $90,000 to their cause this past year. Is the supermacho magazine trying to buy absolution? No, says Playboy Foundation Director Rebecca Sive-Tomashefsky. "Some may call it reparations," she says, "but I don't see any contradiction." Whatever *Playboy*'s intentions, feminists are not appeased. "The fact that we accept their money does not imply that we approve of their policies," says Muriel Fox, head of the legal defense and education fund of the National Organization for Women.

Sweepstakes for kids

Games have been so effective a promotional tool for adults that some companies are now trying them out on children. Last year Quaker Oats ran a game for its Cap'n Crunch cereal. Then, in February, General Mills launched an advertising campaign for six presweetened cereals (Trix, Cocoa Puffs, Lucky Charms, Count Chocula, FrankenBerry and BooBerry) using a sweepstakes as the clincher: "You can win a Sony Watchman TV if you play the Watch 'n Play game." The catch? Kids had to buy cereals or send away for cards and then sit glued to the tube looking for matchups. This raised the hackles of parents at Action for Children's Television, a national advocacy group based in Newtonville, Mass., who filed a complaint with the Federal Trade Commission last month charging that such promotions are deceptive to children. The commercials did note, "Millions will enter, a thousand can win," says ACT President Peggy Charren, but those are not clear mathematical concepts to young children. The overall message, she says, is "Buy cereal, " and that is a no-no on kiddie shows. Although it had yet to see the complaint, General Mills seemed nonplussed. "We would have heard about it from consumers if the ads were a problem," a spokesman said, noting they stopped running them in mid-April. Charren counters that the commercials were "an ad man's dream and a parent's nightmare." ACT wants to stop games for kids once and for all.

The mileage barrier

Jaguar, the comeback automobile of the decade, is headed for a bureaucratic roadblock—Washington's fuel-economy requirement. For 1983, cars sold in the U.S. must deliver 26 miles per gallon; next year the figure goes up to 27 mpg and, in 1986, to 27.5. Major automakers meet these rules by "fleet averages," taking, for instance, all Fords and Chevrolets, big and little,



The Jaguar XJ-S
Straight through the mileage bar.

and coming in with a mean figure that meets Washington's specifications. The Jaguar, which comes basically in just two models, is denied this advantage. So what will the company do? When the 27-mpg flag goes up in 1984, says Graham Whitehead, president of the BL subsidiary's North American operations, Jaguar will start paying penalties to Uncle Sam. "We will consider them a necessary cost of doing business," he says. "And meanwhile we will continue developing a more fuel-efficient engine." The penalties, which apply to any manufacturer turning out more than 10,000 cars a year worldwide, are hardly prohibitive. Jag will have to pay $5 per car for every tenth of a mile it falls below the regulations.

A penny saved

"Rounding down," a relatively new phrase in Uncle Sam's lexicon, has become a new, painless way to save the Treasury money. Introduced by the Congress and the Reagan Administration in 1981, it means that a benefit payment of, say, $292.89 is paid out as $292, with the rest staying in Washington. "It's a relatively painless way to save money, pure and simple," says a spokesman for the Office of Management & Budget. Smoothing out the pennies saved the Social Security Administration $75 million in fiscal 1982 and will cut total payments by $1.1 billion over five years. Similarly, the Veterans Administration, with close to 4 million benefit collectors, will trim its payout by $28.7 million this year and $146 million over five years. The Civil Service Retirement System expects to save $6 million this year and $28 million over three years in payments to its 1.8 million retirees. The military has just stopped paying its 1.3 million retirees to the exact penny, which will save the Pentagon $5 million this year and $9 million in years to come.

South of the border

Latin America's already underemployed labor force will grow by leaps and bounds in the next few decades, according to U.S. population experts. The ranks below the border, 100 million in 1975, will be 200 million by the year 2000—only 17 years away—and 300 million in the following 25 years. The 200 million is a certainty; all those future workers are now born. Neighboring Mexico, for example, with a labor force of 20.2 million in 1980, will reach 28.3 million in 1990 and 40.3 million by 2000. Central America's workers, 7 million strong in 1980, will be 9.5 million in 1990 and 13 million in 2000. These new hordes will multiply the chances of unrest, with consequent growing demands for U.S. help in all forms, to say nothing of the mounting pressure of illegal immigrants on an already overextended border patrol.

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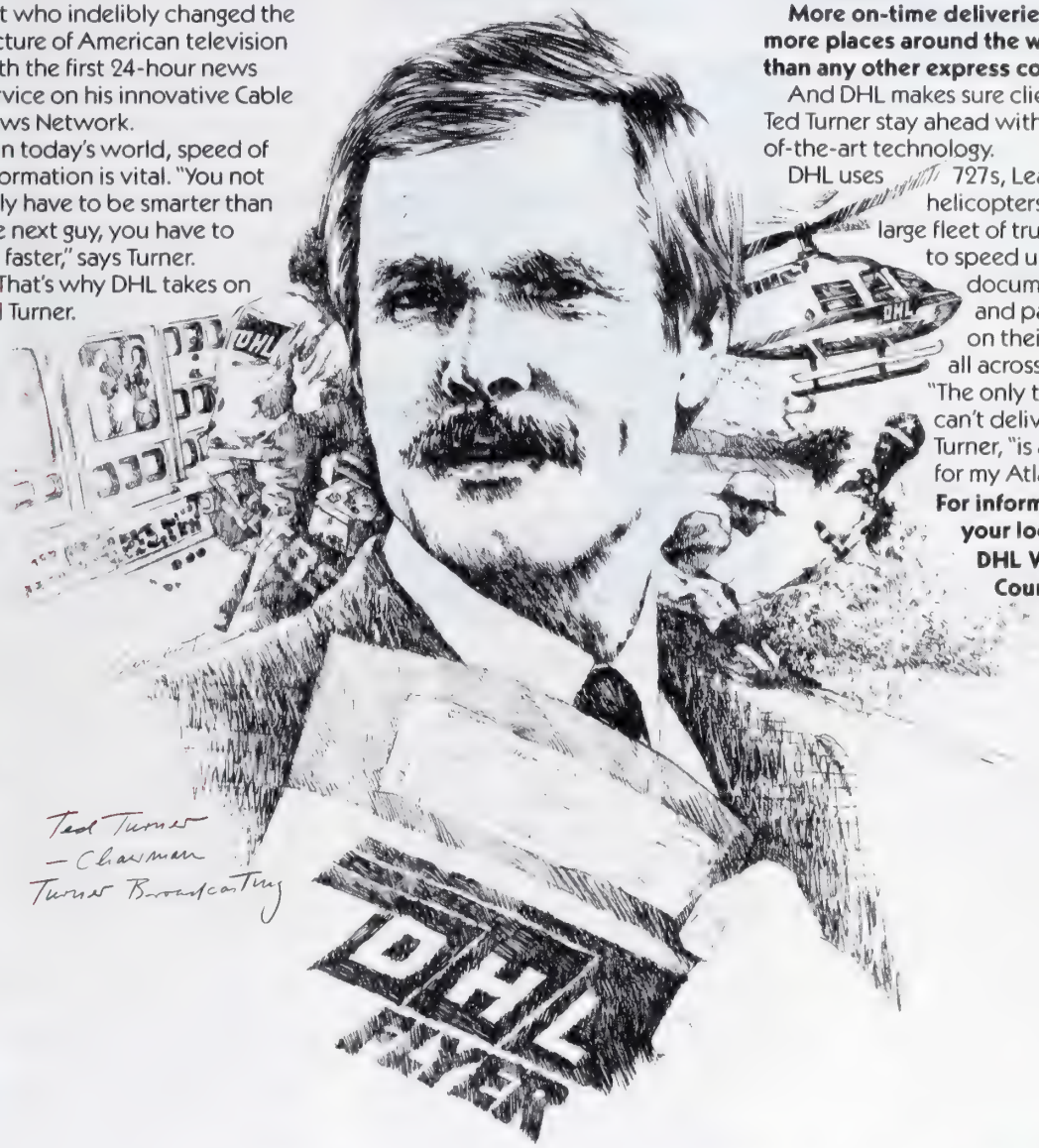

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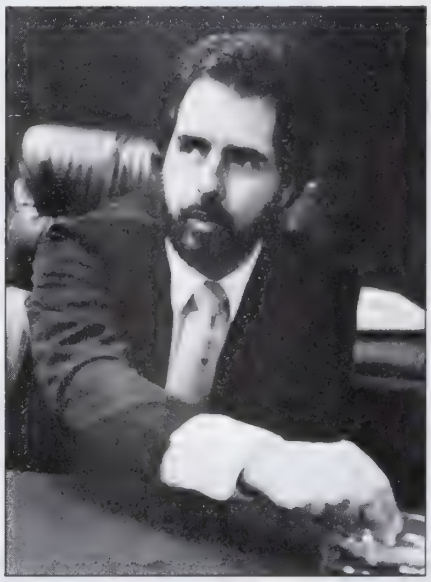
Follow-Through

Fool's gold

Almost a year ago FORBES *(July 19, 1982)* raised a warning flag about the International Gold Bullion Exchange, a fast-moving, free-spending gold-and-silver coin dealer in Florida that offered the precious metals at spot prices, thus saving the buyer a 30% wholesale markup and retail commissions. (Out-of-Florida buyers also avoided sales taxes, since they bought by mail.) Backed by an expensive ad campaign, the Ft. Lauderdale-based IGBE had attracted more than 150,000 customers and $80 million in sales before the Florida attorney general closed it down last month, charging the principals with civil theft and consumer fraud. "We want the corporation dissolved," said Leonard Elias, the state's assistant attorney general. "We allege that they've taken consumers' money and converted those monies to their own use. [IGBE Chairman William] Alderdice admitted as much in the FORBES article, which we attached to the lawsuit."



William Alderdice
All that glisters is not gold.

How could Alderdice's firm market its coins without markups and stay in business? To get the spot price, customers had to send money promptly and then wait up to 15 weeks or longer for delivery. While they waited, Alderdice told FORBES last year, he put the money into CDs. As for the coins, he admitted IGBE often did not cover sales until delivery was due, thus selling short and promising gold and silver it did not yet own. In the falling market that prevailed since IGBE's premiere in 1980 until mid-1982, this practice could be—and was—highly profitable. Since last May, however, gold has gone up over $100, to $460 an ounce, and silver went up 60%, to almost $14.

"Say you want to buy $1,000 of gold. What if gold goes up before I deliver in 90 days?" Alderdice had explained. "If I triple-hedge it and go buy $3,000 worth of gold on Comex, and gold goes up a $100, I got the hundred I need to buy your gold and I got $200 profit on $1,000 worth of gold."

William Alderdice had started wheeling and dealing after he and his brother James, in Ft. Lauderdale for the beach scene, hit upon the coin-selling scheme. Things started to unravel early this year when the Florida attorney general's office received 300-odd complaints about late deliveries from the Miami FBI, which has been investigating IGBE for over a year.

The Floridians blew the whistle, but were hardly the only losers. "I knew there was a snake in the basket," says Bill Clark, a Ford engineer in Dearborn who laid out almost $3,000 for silver bars in May 1982. IGBE stalled delivery but sent Clark checks for interest (at a 30% annual rate) and at one point a check for 25% of the profits he might have earned had he received and sold his silver. Last November he even got a buyout check for over $3,900, then the current market value of his silver. Later he was told he could have his silver and, unfortunately, sent his money back for immediate delivery of his silver—which by late April he had yet to see.

Another customer, Robert Messinger, a New Jersey personnel director, was luckier. He sent IGBE $5,555 last June for 1,000 ounces of silver. The following month, he says, he read the FORBES article and got his silver after calling in the FBI and the FTC.

Five days after Florida's attorney general closed down IGBE, the company filed for voluntary bankruptcy. Alderdice, from his lavish home on Ft. Lauderdale's Intracoastal Waterway, did not return telephone calls from FORBES.

Who's that on the phone?

The big riddle in AT&T's agreement with Justice Department trustbusters to give up its 22 operating subsidiaries was how Ma Bell's children would fare on their own. The biggest questions of all focused on what looked

like the weakest Bell System sister, Pacific Telephone. True, in the closing days of 1982 Congress gave PacTel a lovely Christmas present by enacting a law erasing $1.5 billion in back taxes from PacTel's balance sheet (FORBES, *Feb. 14*). The confusion over the 22 sisters remained, however, and has now been compounded, this time by the differing views of the two major bond rating systems.

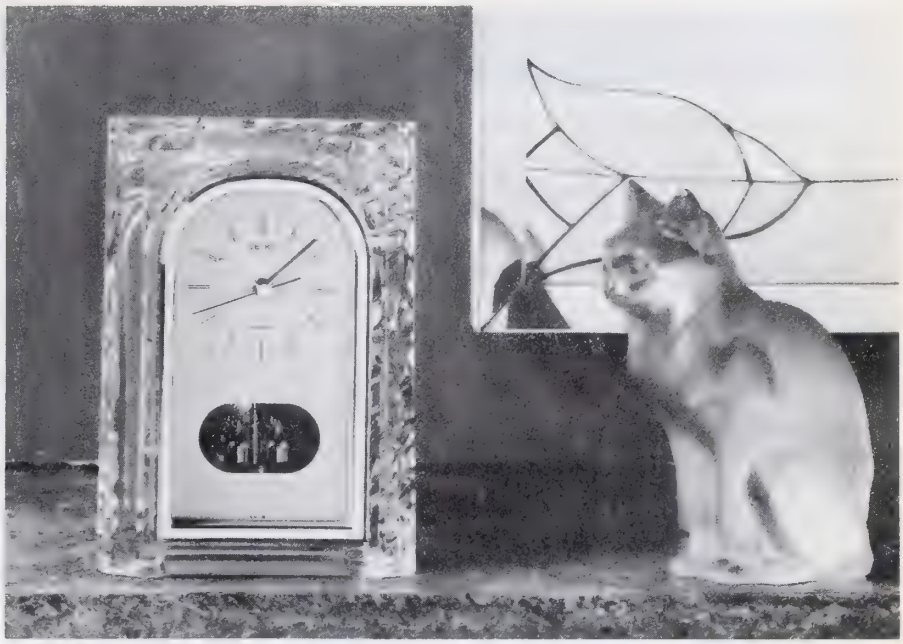
First, Moody's Investor Service chopped the credit ratings of virtually all the AT&T companies. PacTel was dropped down into a range that indicated that its paper carried a speculative risk. Then the other big rating house, Standard & Poor's, gave the telephone companies a rousing vote of confidence, retaining its top rating for eight of Bell's operating units and, lo and behold, raising PacTel's. One rating, in other words, read risk for PacTel's paper, while the other read go ahead and buy it. Then Moody's reversed itself and raised ratings on all PacTel's senior debt. Differences of opinion, it seems, aren't limited to horse racing.

Expenses, shmexpenses

Should a computer software maker's costs to build new products be treated as a day-to-day business expense, or as an investment to be depreciated over the years? At Comserv, a Minneapolis-based firm that makes elaborate systems for manufacturing, profits of $2.2 million in 1981 would have turned to a loss of $1 million if it had expensed product development costs instead of capitalizing them (FORBES, *Jan. 17*). Big bucks also hang on the answer at, for instance, International Telephone & Telegraph (which capitalizes) and ASK Computer Systems (which does not).

Now the Securities & Exchange Commission has jumped into the debate with plans to ban companies that currently expense from switching to capitalization. The ban would be ostensibly temporary while accountants rack their brains for clear guidelines.

The SEC says it is keeping an open mind on the subject. But some people think that computer software development is in fact R&D and should therefore be expensed. Champions of capitalization like Comserv CEO Richard Daly argue that there is a crucial difference: R&D is a shot in the dark; developing computer software, on the other hand, is a step-by-step process in which you know in advance you will complete the project and get paid for it.



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LOUISIANA-**Aaron Rose**, Lake Charles; **Hausmann's**, New Orleans; **Rider's**, Shreveport
MAINE-**Stowell's**, Portland
MARYLAND-**Bailey Banks & Biddle**, Annapolis, Baltimore, Bethesda, Columbia, Gaithersburg, Landover
MASSACHUSETTS-**Stowell's** Boston, Springfield
MICHIGAN-**Morgans**, Lansing; **Wright Kay**, Birmingham, Dearborn
MISSOURI-**Hess & Culbertson**, Frontenac, St. Louis, Springfield; **Jaccards**, Kansas City
NEVADA-**Bailey Banks & Biddle**, Las Vegas; **Granat Brothers**, Reno
NEW HAMPSHIRE-**Stowell's**, Manchester
NEW JERSEY-**Wiss & Lambert Bros.**, Hackensack, Paramus, Short Hills
NEW YORK-**Hertzberg's**, Rochester
NORTH CAROLINA-**Bailey Banks & Biddle**, Charlotte, Durham, Winston-Salem
OHIO-**Bailey Banks & Biddle**, Toledo; **Cowell & Hubbard**, Akron, Cleveland, Youngstown; **Litwin**, Cincinnati; **Max Davis**, Toledo; **Rogers**, Columbus
OKLAHOMA-**Boswell's**, Tulsa; **Peacock**, Oklahoma City; **Rosenfeld**, Oklahoma City
OREGON-**Zell Brothers**, Portland
PENNSYLVANIA-**Bailey Banks & Biddle**, Philadelphia, Pittsburgh
TENNESSEE-**Brodnax**, Chattanooga, Memphis, Nashville
TEXAS-**Aaron Rose**, Beaumont; **Corrigan's**, Austin, Dallas, Ft. Worth, Houston, San Angelo; **Hertzberg's**, San Antonio; **Kruger**, Midland; **Wagner's**, Amarillo
UTAH-**Bohm-Allen**, Salt Lake City
VIRGINIA-**Bailey Banks & Biddle**, McLean
WISCONSIN-**Bailey Banks & Biddle**, Milwaukee
WYOMING-**Argenzio Brothers**, Casper

Readers Say

Cut something in return

SIR: You lambaste President Reagan for his unconscionable budget deficits *(Fact and Comment, Apr. 25)* and then below on the same page plead for spending more money in the strategic oil reserve.

You may be right about purchasing oil, but what do you demand we trade for it? If you do not have a spending cut to go along with your boost, we will be worse off than we were.

—John James
Chicago, Ill.

No more masses

SIR: Hurrah for James Cook's cover story "What Drives The U.S. Economy? Services Or Goods?" *(Apr. 11)*. We should not be conned into attempted "reindustrialization"—a futile effort to revive the past.

One added point: The smokestack economy, as I've detailed in *The Third Wave* and *Previews and Premises,* is based on de-massification.

This means more custom production of both goods and services and more market segmentation. It will require new kinds of education no longer based on the factory-style schools of the past.

—Alvin Toffler
New York, N.Y.

Doleful comment

SIR: Senator Bob "Redistribute the Wealth" Dole ("Sniffing the wind," *Mar. 28*) could have figured the oil import tax out without your help. He has us motorists paying to repair the highways that truckers wrecked. He has allowed even bigger trucks to wreck them faster the next time around. He has us motorists paying the bills for mass transit riders who are allergic to paying full fare.

—W.M. Buescher
Pigeon Forge, Tenn

Lively Latin debate

SIR: What a delight to find another person who needed 3½ years to gain 2 years of credit in Latin *(Fact and Comment, Apr. 11)*. I didn't know whether I was stupid or stubborn.

It is comforting that two survivors of this academic horror managed to find a degree of success in the demanding discipline of conveying ideas and opinions to the public.

—Jack Mabley
President,
Mabley & Associates
Glenview, Ill.

SIR: I strongly disagree. Latin is a useful learning tool.

In my fifty years of business experience, my work involved much writing and a lot of public speaking. Latin taught me good grammar, a wider vocabulary, correct syntax and sentence structure and, of equal importance, a better knowledge of the meaning of words. It teaches one to speak logically, to write logically and to think logically.

—T.M. Forbes Sr.
Atlanta, Ga.

SIR: Your own clotted, eccentric and often unreadable writing style would have been greatly improved if you had spent a little more time reading Caesar and Cicero and a little less time immersed in annual reports.

—Richard C. Hughes III
New York, N.Y.

Ad stocks

SIR: Your editorial *(Fact and Comment, Apr. 11)* noted the error of taking advertising agency stocks too lightly back in the early Seventies. [You left] out the best-performing advertising agency stock of them all. On Oct. 24, 1973 Grey Advertising was selling for 10⅝. Our recent price was 90 bid, 99 asked. At 90, our increase is 747%—half again better than Interpublic's 532.4%.

—Edward H. Meyer
Chairman and President,
Grey Advertising Inc.
New York, N.Y.

Similar from the start

SIR: In Fact and Comment *(Feb. 28)* you said, "We've commented here in the past on how often couples, pictured in local newspapers on their 50th wedding anniversary, have come to look alike."

The couples don't come to look alike; they looked alike when they got married. Examine photos of engaged and newly married couples, and you would be astounded how much they resemble each other, especially the mouths.

I am enclosing a few samples for your enjoyment.

—Betty Hall
Hoyt Lakes, Minn

Filling a gap

SIR: Your specific reference to "Our Green Berets, 101st Airborne, Rangers and our Marines" ("In Ground Combat, Esprit's The Name Of The Game," *Fact and Comment, Apr. 25*) leaves a huge gap where the 82nd Airborne Division should be.

—Norman D. Davidson
Member,
82nd Airborne Division 1960-63,
Salem, Ore.

Can't nag a racehorse

SIR: Re your article that humans are improving their running times faster than horses *(Apr. 25)*.

Certain men and women have both the body and the will to engage in a strenuous training program—and thus benefit by it. Thoroughbreds aren't so gifted.

The problem is a 1,200-pound animal running 40mph on matchstick legs. Increased training risks further injury. Second, can any trainer imbue the horse with a burning desire to win and set records?

—Richard Karlgaard
Redwood City, Calif.

SIR: After a bit of algebra and a few more strokes of my calculator, I can now boldly project that in 453 years a man will win the Kentucky Derby.

—Stephen J. Przybylko
Dayton, Ohio

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Fact and Comment

By Malcolm S. Forbes, Editor-in-Chief

ALL OF A SUDDEN EVERYBODY'S ON GEORGE SHULTZ' BACK

but his insurmountably difficult Mideast shuttle would just as swiftly get them off—for a wee while—if he could pull off any significant freeing up of Lebanon.

It must amaze, confuse and bemuse the rest of our citizens to watch how, overnight, so many in our punditing business can switch from stroking to piranha-ing yesterday's public pet. I like the way our Secretary of State commented on his commentator critics before he left:

"Nobody likes criticism. I guess it comes with the territory. I have to do my best and do what I think is right and then everybody can make their judgments. Everybody's entitled to their point of view—even me."

FOR A NEW FED CHAIRMAN

President Reagan couldn't do better than Alan Greenspan.

MANAGEMENTS WHO DISPOSED/DISPOSE OF TOXIC WASTES

dangerously should have the book thrown at them. If those top managements are still around who did it, or are doing the same still, their boards of directors should throw them out, as they did the toxic wastes.

It's hard to conceive that such giant corporations as those majors in chemicals didn't long ago tackle the whole waste problem and wrestle it to the point of solution.

They and other corporations had to be aware—long before an aroused public was—that there was no way to sweep the problem under the rug for long, i.e., into the streams and porous ground around.

Who better could come up, in their research and development programs, with ways of detoxifying the toxic, of encapsulating what can't be made to go harmlessly away?

What a fantastic new business opportunity for those who can, or have, or will come up with the least expensive solutions. The problem has been around long enough, the needs are great enough that the potential for profit in a solution, vis-à-vis the cost of ducking a solution, is huge.

It's beyond understanding that top management would not meet the problem head-on, instead of, as in some current instances, waiting around to be bludgeoned, albeit belatedly.

RE "STAYING THE COURSE," FOR SURE CAP WILL

There are those who speculate that the mounting tempo and temper of criticism for Defense Secretary Weinberger's absolute refusal to consider removals from his overflowing budget platter might lead to his reassignment or resignation. They're whistling Dixie.

We've contributed our critical mite, e.g., "Cap the Butterknife," etc. But we've never deluded ourselves that such might have much result.

The Defense Secretary feels—rightly, I think—that any offer of his to reconsider or "postpone" major projects, such as the MX missile or additional carrier groups, would be taken as a given by Capitol Hillers, and they'd promptly be in full cry for more. No one around the President enjoys his confidence more than Secretary Weinberger—and few for as long. Reagan's delighted with Cap's stubborn "standup" to his critics.

During this blazing Defense budget battle, people tend to overlook the fact that Cap Weinberger is one of the few

genuinely and thoroughly nice guys in Washington. That's part of the problem. His convictions are genuine. He's not posturing for political power. That's more of a problem.

If he were less nice, he wouldn't have been persuaded by all the Braid that everything they have asked for is essential. If he were more political, he would realize that Congress can't buy a deficit of a size that many of us feel would weaken America more than the proposed spending would strengthen it.

If Cap were to recommend to the President that, considering the Whole Equation, perhaps it would be better to hold off on some of those Big Tickets, for sure Ronald Reagan would listen.

Oh, would that Cap would.

STOCKHOLDERS PAY TO SAVE RED FACES

"Buyer beware" is a marketplace commonplace, plain common sense in the first place. But consumers are—rightfully—protected against fraud or misrepresentation that can endanger life or limb.

Corporations are entitled to the same.

In many an acquisition, what was acquired doesn't always turn out to be as represented, or as unperspicacious accountants may represent it as being. Rarely, though, do top managements like to admit they've been taken by taking such action as filing suit. They're afraid to be dubbed gullible or dumb. Stockholders end up losing some dividend income to save some managements' red faces.

What brought all this to mind was Grumman's filing of a half-billion-dollar lawsuit against Rohr Industries. You may recall the Grumman buses that have been made infamous for their multiple failures during their rugged use and abuse on New York's potholed streets. Grumman bought its bus division from Rohr and claims that the seller knew of some of the structural problems that had developed during prototype testing and failed to tell the buyer about it.

The courts will decide if the suit is with or without merit, but we're applauding a management that isn't above facing the facts instead of covering up with monies that might otherwise have been shared with shareholders.

IF YOU THINK INTELLIGENT BUSINESS REPORTING'S EASY

just compare these two headlines, on the same day, about the same quarterly earnings report:

RCA Slides 46.6%;

—New York Times

RCA Earnings Climbed by 47% In First Quarter

—Wall Street Journal

Hard to believe, isn't it?—two such contrasting perspectives of the same facts by two such respected journals for business reporting. In this case—and as so often is the case—the *Wall Street Journal* headlined the meaningful figures in that RCA first-quarter earnings report. On a comparable basis, actual earnings are sizably up. That's a *very* significant fact for this long-trouble-plagued corporation.

The *Times* headline, while factually accurate, is totally misleading. The 1982 quarter being compared to this year's was only higher because of unusual, nonrecurring gains, including the sale of some businesses and a one-time-only tax procedure.

It wasn't a question of one journal emphasizing the positive, the other the negative. The important thing in that quarterly report is the clue to RCA's return to health.

MOVIES

Bad Boys—It's hard to imagine the year producing any film more brutal and bloody. It's a well-acted, tense portrayal of inner-city-youth crime, and how the piper's paid in juvenile detention "facilities." If it's entertainment you're after, this isn't. **Britannia Hospital**—Those raving critics who acclaim this as humorous should be promptly admitted to this institution. It's bloody, as we use the word, and bloody bad, as the British use the word. **La Nuit de Varennes**—An absolutely delightful film about a witty, motley lot hot on the heels of Marie Antoinette and her Louis trying to escape from France. What a treat to see yesteryear's bawdiness instead of today's explicitness. Acted with charm and filmed with unpretentious beauty. **Local Hero**—Refreshingly different, a film to relax with and enjoy. Even the Houston Big Oil man is only gently spoofed, ending up eccentrically lovable as he waives grandiose plans to cover over a charming backwater Scottish harbor village with a Saudi-size oil megalopolis. Sometimes some of the Scottish burrs even sound authentic. **The Outsiders**—This hyper-simplified version of wrong-side-of-the-tracks teeners warring with snooty (and snoots-ful) right-side-of-the-trackers is so exaggerated as to be irrelevant. The film's a slam banger anyway, but not for those of us whose teens are some decades past.

TO SAY NO
when Yes is in order
is to cause disorder.

A MAN CAN'T
do more than he can—but he
can at least do that much.

NO BOOK YOU'VE NOT READ IS OLD

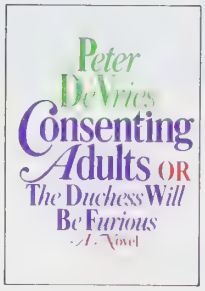
Occasionally books reviewed here have been out a long time. They're ones I bought when they were published and didn't get a chance to read until recently or, in some cases, these wee reviews were written some time ago but didn't get into print until now. Anyway, any book you haven't yet read is new, whether it's just off the press or long in print.

The Days of the French Revolution—by Christopher Hibbert (William Morrow & Co., $12.95). A who-done-it-to-whom, sequencing the bloody, confusing power shifts between Louis XVI's fall and Napoleon's rise. One day's head choppers become next day's chopped.

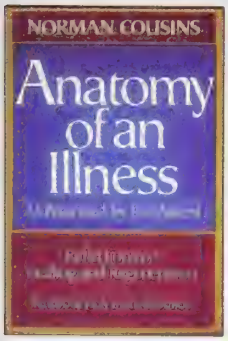
Excerpt: *Louis turned to Roux* [a leader of the leftist faction, Enragés] *with a parcel containing a few personal belongings and his will, which he asked him to give "to the queen." "To my wife," he added hastily, amending the words.*

"I have not come here to do your errands," Roux roughly replied. "I am here to take you to the scaffold."

The Victorian and Edwardian Army from Old Photographs — commentaries by John Fabb (David & Charles, Inc., $24). These very early photographs, many of the Crimean War and the British Army in India, convey more completely the reality of their time than the best of novels and the most well-written histories possibly could.



Consenting Adults, or The Duchess Will Be Furious—by Peter de Vries (Little, Brown & Co., $10.95). I tried again to get through a book by this vaunted author but just couldn't make it beyond page 81. Surely he's more talked about than read?

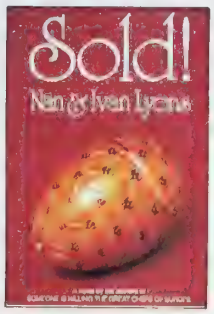


Anatomy of an Illness—by Norman Cousins (W.W. Norton & Co., Inc., $9.95). Anyone who's suffering a critical illness, or wants to know how to cope if and when, will find well spent the hour or two it takes to read this long-bestselling Norman Cousins prescription. He's living proof of the power of positive-belief-in-thinking cure.

Excerpt: *Pain is both the warning system and the protective mechanism that enables an individual to defend the integrity of his body. Its signals may not always be readily intelligible, but at least they are there. And the individual can mobilize his response.*

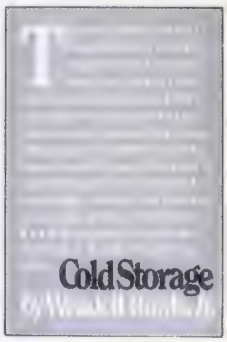
Colorado's Hidden Valleys—by John Fielder (Westcliffe Publishers, $29.95). One hundred thirty-nine refreshingly magnificent color photographs, a stunning contrast to blatantly color-distorted scenic postcards aimed at the wish-you-were-here tourist trade. Printed in Japan, this book's proof that the Japanese do that as superbly as they produce the best in cameras and lenses.

Sailor–A Pictorial History—by Alan McGowan (David McKay Co., Inc., $14.95). A superior volume depicting the evolution of today's fighting seaman.



Sold!—by Nan and Ivan Lyons (Coward, McCann & Geoghegan, $12.95)—is a lively tale about what goes on behind the scenes in the auction world. In this instance, the story revolves around some long-lost, just-found major Romanoff Fabergé pieces. With one of the FORBES Magazine Collection Imperial Eggs on the cover, and a couple of references to us, how could this not be a great novel!?

Excerpt: *Coussac smiled. "I remember my father explaining to me that the difference between a customer and a collector is the collector thanks you for allowing him to spend his money."*



Cold Storage—by Wendell Rawls Jr. (Simon & Schuster, $10.95). Shocking is the only word for this Pulitzer Prize-winning reporter's disclosure of Pennsylvania's Fairview State Hospital for the Criminally Insane. Once one is tagged mad by the state, no matter how trivial the crime, a "patient" hasn't a leg to stand on vis à vis his "keepers"—figuratively, and all too often, literally. So far as I know, no state or nation has come up with an embracing, lasting answer to the institutional treatment of human beings who fall from grace.

Other Comments

Often comments by others stimulate, irritate, abuse or amuse this editor's mind.–MSF

DRAWING BY DANA FRADON; ©1983 THE NEW YORKER MAGAZINE, INC

"Sir, we find there's no way of cutting the military budget without cutting the military budget."

Who's Helping Who?

In hiring young people for summer jobs, we're not doing anyone any favors. No business can long prosper in an unhealthy environment, in a polarized society that locks millions out of the mainstream. These young men and women need the money. Their families need the money. The economy needs the money.

—George Weissman, chairman, Philip Morris

Garbage Dumps Needed

The nation's nuclear plants have disgorged about 8,000 tons of toxic garbage, and vast quantities of even deadlier wastes have been left behind as by-products of the nuclear arms race. Congress wrestled with the [disposal] question for five years before passing the Nuclear Waste Policy Act in 1982. Energy Secretary Don Hodel has already informed the governors of Washington, Nevada, Mississippi, Utah, Texas and Louisiana that their states are candidates for the first dump; DOE is considering granite formations near the Great Lakes or on the East Coast as possible sites for the second. . . .

Wherever it is located, the first repository will lie in a rock or salt formation 2,000 to 4,000 feet below the surface of the earth. It will store about 70,000 metric tons of waste—considerably more than commercial reactors are expected to generate by the year 2000. Environmentalists fear that water might seep into the dump and carry radioactivity away. But DOE official Michael J. Lawrence claims that it would take much more than 10,000 years for water to penetrate from the chamber to the periphery of the site, which will extend six miles in all directions from the storage area. In that time, he says, the rock will act as a filter, absorbing the radioactive ions safely underground. Most experts agree that subterranean rock formations are by far the best storage sites for nuclear wastes.

—Harry Anderson and William J. Cook, *Newsweek*

Birth of Right & Left

The Assembly settled down to face the problems of reform. The radicals sat on the President's left, the less numerous conservatives on his right, this disposition providing thereafter, in other countries as well as France, a useful addition to the terminology of politics.

—*The Days of the French Revolution*, by Christopher Hibbert

College Sentence

Noting that it is cheaper to pay for a college education than a prison term, Carlsbad, New Mexico, District Judge Harvey Fort sentenced twenty-seven-year-old Debbie Black Barrett to six years in college. Barrett was charged with kidnapping, armed robbery and aggravated assault in connection with the wounding of her husband, David Barrett.

Commenting on the forty-dollar-a-day cost of maintaining an inmate in New Mexico state prisons, Judge Fort said, "I'd like to send them all to Harvard."

—AP, as quoted in *National Lampoon*

Reagan Rescue

Ronald Reagan may rescue his presidency by a deft and pragmatic turn. But it is going to be a close thing at very best. Since when was a $200 billion deficit more of a Reagan program than a delay in a tax cut? That makes no sense, and things that make no sense are not things that Americans like.

Johnson, Nixon and Carter were all outrun by events and brushed aside within the past 20 years. Each time, the decline began when friends and supporters in the center found their appeals ignored and went off on their own because something needed to be done.

—Hugh Sidey, *Time*

Whose Cabin?

A developer is someone who wants to build a cabin in the woods. An environmentalist is someone who already has a cabin in the woods.

—*Life*

Americans believe in the future as if it were a religion; they believe that there is nothing they cannot accomplish, that solutions wait somewhere for all problems, like brides.

—Frances FitzGerald, *Fire in the Lake*

Definition

Seems the first thing we should do, I opined (always wanted to opine), is to define some terms. I tried to make the point that you can't depend on something being what you call it, just because the label seems to fit, or because you want it to. Like, we all recalled jumping off of Tommy Ramsey's garage roof as kids. Tommy insisted that his blanket was a flying carpet, but him calling it that didn't make the ground any softer.

—T.J. Rafferty, *Cycle Guide*

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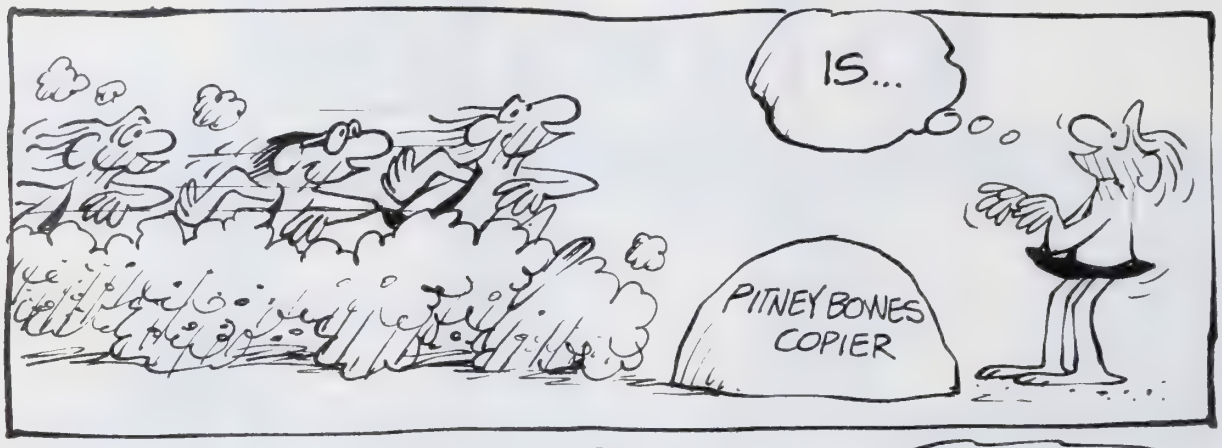

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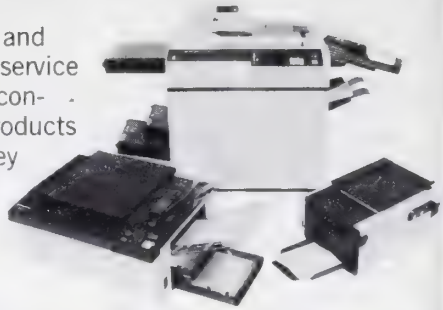

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Fact and Comment II

By M.S. Forbes Jr., Deputy Editor-in-Chief

DOES PROSPERITY CAUSE INFLATION?

This recent headline *(see below)*, generated by Martin Feldstein, chairman of President Reagan's Council of Economic Advisers, underscores one of the glaring flaws of economics today, a theoretical shortcoming that has cost the economy, and investors, dearly—and could do so again.

Feldstein: slow growth will dampen inflation

DETROIT (AP) The nation's economic recovery will be slower than it had Feldstein said at a news conference prior to an appearance before

"Slightly less than 5 percent strikes me as really very good in that

It's the notion that there is a tradeoff between inflation and unemployment: If you want to bring down inflation, the price is high unemployment; conversely, if you want to reduce unemployment, you will get more inflation. Martin Feldstein reflects the notion well when he says: "One of the reasons [inflation won't come roaring back] is that we will have a moderate recovery. . . . A slower-than-average recovery strikes me as really very good in that it will keep the inflation rate from heating up."

In other words, good times cause inflation; bad times, stabler prices.

Curve Ball

The tradeoff is known to economists as the Phillips Curve, and they were taught in school that policymakers should strive for an acceptable mix between the two. This meddling didn't "smooth out" economic cycles; instead, it sapped the economy's vitality. Neither the government nor the Federal Reserve can bring about "equilibrium," for reasons brilliantly explained in our cover story *(see p. 124)*.

The Phillips Curve, fallacious though it may be, dominates the economic thinking even of those who might mistake the name for a baseball pitch.

For example, carefully read bond-market commentaries: If the economy appears buoyant, bond experts are bearish. Economic activity is equated with higher interest rates. If the economy looks sluggish, they're bullish.

Men like Federal Reserve Chairman Volcker and his probable successor, Alan Greenspan, share Feldstein's Phillips Curve mentality. That's why Volcker is loath to nudge interest rates down until he is convinced the recovery will be anemic. Too strong a bounce-back, he repeatedly intones, will "rekindle inflationary expectations."

This thinking has its roots in the Great Depression, a shattering experience which convinced thinkers that an economy would sputter if left to its own devices. Thus, to prevent stagnation, government would stimulate activity through increased spending, through manipulating interest rates.

So economists saw the economy as an engine—it wouldn't work without fuel, the fuel being money pumped in by Uncle Sam or the Federal Reserve.

To economic experts, then, inflation is a sign that people have too much money in their pockets; inflation, after all, is "too much money chasing too few goods." Stagnation and recession, on the other hand, mean people have too little money.

The stagflation of the 1970s—when we had both high inflation and high unemployment at the same time—should have prompted deep soul-searching. How could people simultaneously have too much money (inflation) and too little money (stagnation)? Experience may be a hard teacher to practical people in the everyday world, but theorists simply fault the world, not their philosophies, when things don't go according to the textbook.

Ignoring History

Contrary to what the Volckers and Feldsteins of the world may think, history shows prosperity doesn't cause inflation, and bad times don't mean lower interest rates. Most countries boomed as never before in the 1950s and through the mid-1960s with minimal inflation. The steep recession of 1980-82 saw real interest rates zoom.

One hopes Alan Greenspan, should he be appointed Volcker's successor, will be strong enough to overcome his education, that he will realize vigorous economic activity isn't a cause of inflation; that he will have the courage to examine the successful monetary systems of the past to see what their common denominator was. (Hint: It's a four-letter word.)

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A lot of banks have been dangling the high interest carrot. Did you bite?

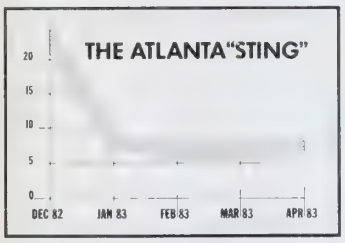
Many banks and savings and loan associations introduced their Money Market Deposit Accounts with high promotional rates. Some over 20%.

This was, in effect, a "come on" to get your account.

Take a look at those bank rates today; the overall bank average is hardly different from that of Money Market Funds. And some banks are already paying less.

If you left a Fund for the "bank version" maybe you should consider coming back. Here are the reasons why.

You could begin by considering some of the differences between a Bank Money Market Account and a Money Market Mutual Fund. The Account is *not* a Fund.



One of the more glaring examples of the "come on" took place in Atlanta. After offering interest rates of over 20%, the banks dropped them by more than half in less than two months. Then they fell even more.

A Money Market Mutual Fund is the pooling of your money with that of other investors to get high current returns. Your money is invested only in the money market in high quality short term securities. The same kind of securities the most sophisticated investors use to safeguard their own money.

With a Fund, you become a shareholder. You and the other shareholders receive *all of the income earned by the Funds*, less modest operating expenses. A Money Market Fund *must pay the same market rate to everyone* and there is strict regulation by the U.S. Securities and Exchange Commission to make sure it does. It is all aboveboard. And though Money Market Funds are not insured, they have an outstanding record of safety.

Now with a bank, you are not a shareholder; you've only got an account there. It can use your money any way it chooses—even in making its own loans and investments that have nothing to do with the money market.

What's more, the bank can pay *whatever rate it wants to and then keep for itself any profit it doesn't pay you.* (That's why their interest rates have come down so much.) There just is no guarantee that the interest a bank pays you will be a true money market rate. Or that you will receive *all* of the income your money generates. Or, that the bank won't discriminate; it can pay higher rates to its preferred customers. You get less yield and the big depositor gets more. *This is already happening.*

You should also consider some of the bank limitations. They require a minimum balance of $2,500 to get their advertised interest rate. If your investment drops below that, you get only 5¼ percent interest. *You're back to the old passbook rate.* (Most funds, on the other hand, allow a minimum investment of as low as $1,000 or less and pay you the market rate even if your account is temporarily below that limit.) It is a fact, too, that you can never write more than three checks a month on your bank money market account without incurring a penalty.

Funds, meanwhile, offer a number of other advantages—valuable investor services such as an unlimited number of withdrawals by check, although minimum amounts vary among different funds. Also, many of them offer the ability to switch as often as you'd like into other types of mutual funds to take advantage of changing investment opportunities—by making a simple telephone call.

All features considered, most investors would find they're better off now in a Money Market Mutual Fund. You can check this out by comparing your local bank or S&L offer against that of a particular Fund or two. Just call any Money Market Fund and ask for its prospectus. And remember, for us in the Funds, the Money Market is not a sideline. It's where we invest your money full time, every day.

AMERICA'S
MONEY MARKET MUTUAL FUNDS
The full-time professionals in the Money Market

Edited by Thomas O'Donnell

LIES, DAMNED LIES, AND M1 STATISTICS

Its critics claim the Federal Reserve Board has loosened up too much on the money supply and, as a result, inflation will inevitably heat up later this year or in 1984. What's Ahead thinks the critics are wrong.

Why the M1 and M2 numbers are misleading

TRUE, OFFICIAL FIGURES INDICATE that the money supply has been surging. Since last summer the basic money stock, M1, which is made up mainly of currency and checking account balances, has increased at a 12% annual rate. M2 (M1 plus time and savings deposits) has been expanding at over 20% since December.

But the official figures are misleading. M2, for example, has been distorted by inclusion of the new money market deposit accounts (MMDAs). Through March these accounts attracted an estimated $66 billion from sources outside M2. That's not new money. It's existing money. Subtract this sum and M2's rate of increase drops to less than half the reported rate—a modest 8.5%—a rate slightly less than the rise in nominal GNP over the same period.

Don't ignore the "laziness" factor

THERE IS ALSO LESS to the rise in M1 than meets the eye. What's Ahead contends that the 30% fall in money market interest rates has decreased the penalty for leaving money in interest-bearing checking (NOW) accounts and for holding cash. Last summer, when money market rates were at 12%, an individual who had money in a 5¼% NOW account sacrificed 6¾% in interest. At today's 8½% rates, the sacrifice has dropped to 3¼%. "Individuals have gotten lazy," John Paulus, Morgan Stanley's chief economist, points out. "They're not going to move money out of M1 for such a small premium."

A second, less important factor accounting for the rise in M1, we suspect, is the imposition of checking account fees by banks. By buying with cash or by building credit card balances and then paying by large checks on "free" MMDAs, individuals can avoid these fees.

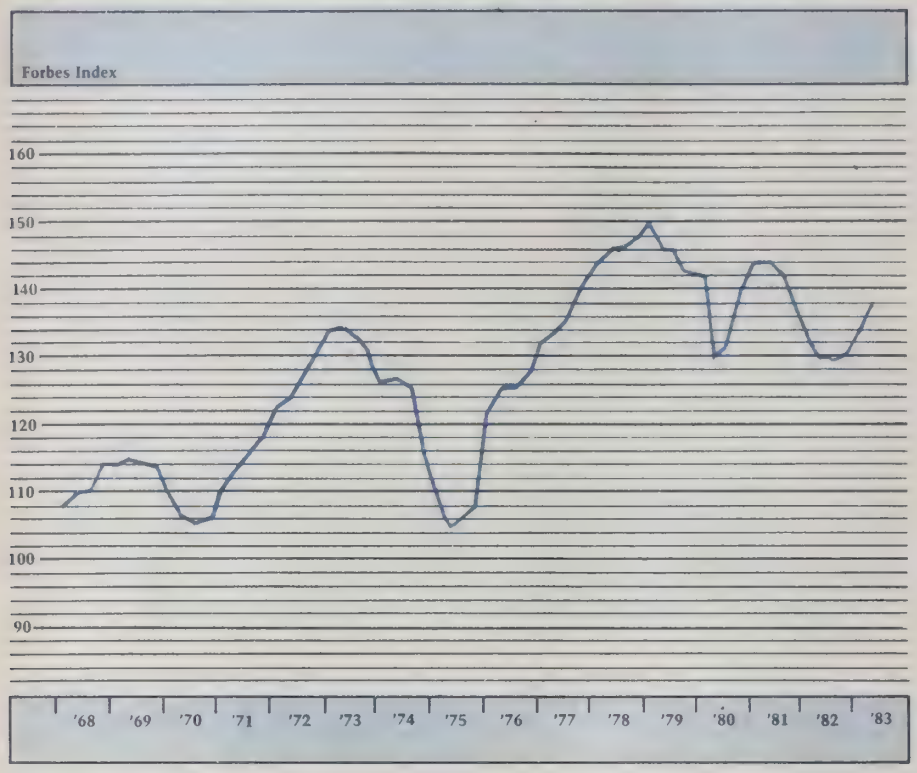
A third distortion in the money supply figures is introduced by the new Super NOW accounts, which carry a market interest rate. Some $30 billion were deposited in Super NOWs from January, when they were introduced, through mid-April. Some 25% of the total, approximately $7.5 billion, has come from outside M1.

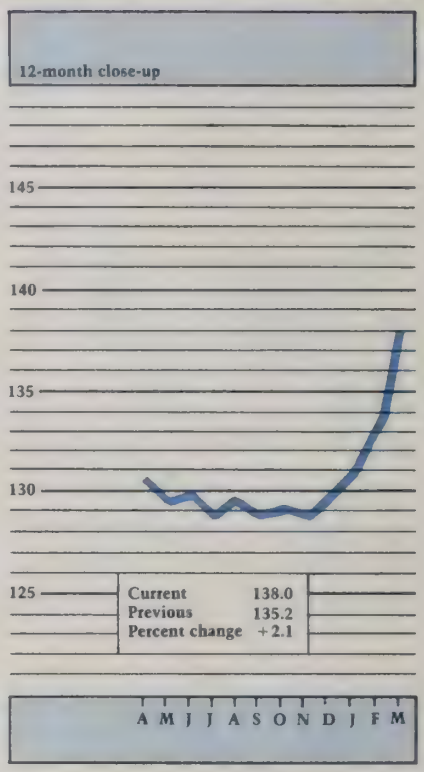
Further drops in money supply are coming

AS THE FED WELL KNOWS, though, the facts are one thing and capital market psychology is quite another. That's why you can expect the official numbers, with all their flaws, to constrain further growth in the money supply. We have just experienced one drop. During the two middle weeks of April, M1 contracted by $5.1 billion. But that was largely a technical drop because the official figures exclude IRAs. IRAs, which represent permanent investments unlikely to be tapped soon, attracted billions before tax time. Most of that came out of M1 and M2.

What's Ahead expects further drops, not as a technical sideshow but as a clear signal from the Fed that, with the economy starting to perk up again, it has not lost sight of inflation fears.

The Forbes Index





Gaining momentum. The Forbes Index is up 2.1%, a stronger showing than in the previous reporting period.

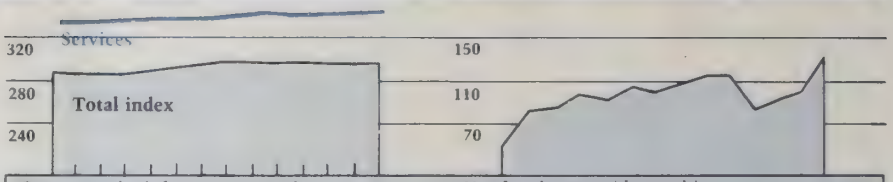
This time all signals that make up the Index flashed green. Industrial production, posting its biggest increase since February 1982, was up 1.1%. This compares with a 0.3% gain a month earlier. New housing starts jumped 40% in March, against a 5.1% rise in February.

Even though the economy is heating up, inflationary fires are not being rekindled. Both the service sector index and the start to Consumer Price Index moved up a scant 0.1%. If consumers spend heavily, 1983 could quickly turn into a banner year. The potential of this buying power is clear. Personal income in March gained 0.6%, vs. a 0.1% dip for the preceding reporting period.

The Forbes Index Components

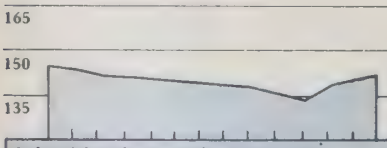
The FORBES Index is a measure of U.S. economic activity composed of eight equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, the level of new orders for durable goods compared with manufacturers' inventories, total retail sales, new housing starts, personal income, the change in the amount of consumer installment debt outstanding.

To measure these eight elements, FORBES monitors 11 series of U.S. government data. The last 14 months' data for each series are presented at right.

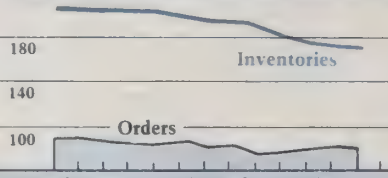


Consumer price indexes (1967 = 100)
all urban consumers, unadjusted (Dept. of Labor)

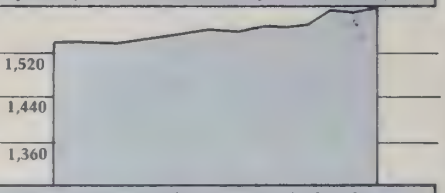
New housing starts (thousands)
privately owned, unadjusted (Dept. of Commerce)



Industrial production index (1967 = 100)
Seasonally adjusted (Federal Reserve)

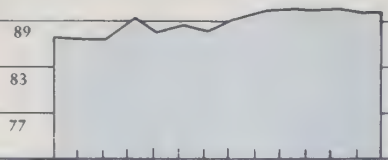


Manufacturers new orders and inventories
($billions) seasonally (Dept. of Commerce)

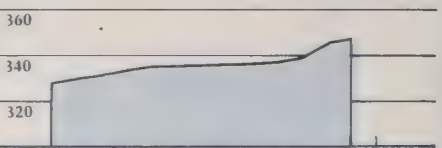


Personal income ($billions) wage and salary disbursements, seasonally adjusted (Dept. of Commerce)

Unemployment claims (thousands)
seasonally adjusted (Dept. of Labor)



Retail store sales ($billions)
seasonally adjusted (Dept. of Commerce)



Consumer installment credit ($billions)
total, seasonally adjusted (Federal Reserve)

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Consumer Orientation
No. 22 in a Series
Subject: Luftwiderstand.
The Porsche Concept of
Aerodynamic Efficiency.

22 Porsche 944

We live in an ocean of air. Seemingly, it offers no resistance as we walk through it. But, in fact, air does resist the forward movement of any object passing through it. Resistance increases with the square of the object's speed. And the power required to overcome it increases with the cube of the object's speed. Thus, even a small reduction in drag can improve both performance and efficiency.

To some, the best measure of a car's aerodynamic efficiency is its coefficient of drag, or C_d: a numerical value—the lower, the better—based on the ratio of the amount of wind resistance a car encounters to that encountered by a flat plate of the same size, facing perpendicular to the airflow.

At Porsche, based on years of racing experience, we believe a better measure is a car's *luftwiderstand:* an air resistance rating that is the product of $C_d \times F$ (where F is the car's frontal cross section in m^2).

The 944 benefits from over 70 years of Porsche aerodynamic development. Its C_d is a low 0.35. And its F is a mere 1.82 m^2. As a result, its luftwiderstand is a highly favorable 0.637.

Because of the 944's design, while its 2.5-liter Porsche engine produces 143 hp at 5500 rpm, it requires only 13.9 hp to cruise at 55 mph. Thus, at maximum highway speed, the 944 has an unused reserve of 129.1 hp.

To combat aerodynamic lift forces which can adversely affect handling, the 944 is equipped with integral front and rear spoilers. In addition, the 944's transaxle design creates a high polar moment of inertia that resists cross-winds and increases directional control.

At Porsche, excellence is expected. For your dealer, call toll-free: (800) 447-4700.

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NOTHING EVEN COMES CLOSE

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How you can tel

They're both IBM Personal Compu
And they're the same. Only different.

The system that's on the left is the ideal solution for a person who wants to be creative, efficient and improve his or her personal productivity.

So is the other one.

The system on the left incorporates the quality, the reliability and the technological excellence that have made IBM a computer leader for over 30 year

So does the other one.

So which is which? Simple.

On the left is the IBM Personal Computer, starting with 64KB of use memory (expandable to 640KB) and two optional 5¼" diskette dri It can easily satisfy your computing needs at the office, at home or in sch With 5 expansion sl it gives you room to grow. (You can even make it function like the computer shown on the right by adding an expansion unit that houses one or two 10-million-character fixed disk drives.)

This system can run most of the same software and accept most of the same IBM hardware as the computer o the right. And its price/performance is nothing less than remarkable.

The IBM Personal Computer

vhich is which.

On the right is the IBM Personal
puter XT, starting with 128KB
er memory (expandable to 640KB),
" 360KB diskette drive *plus* a
ard 10-million-character
disk drive that's *already* built in.
For a businessperson with
weight data requirements, the
acks a lot of power, because it
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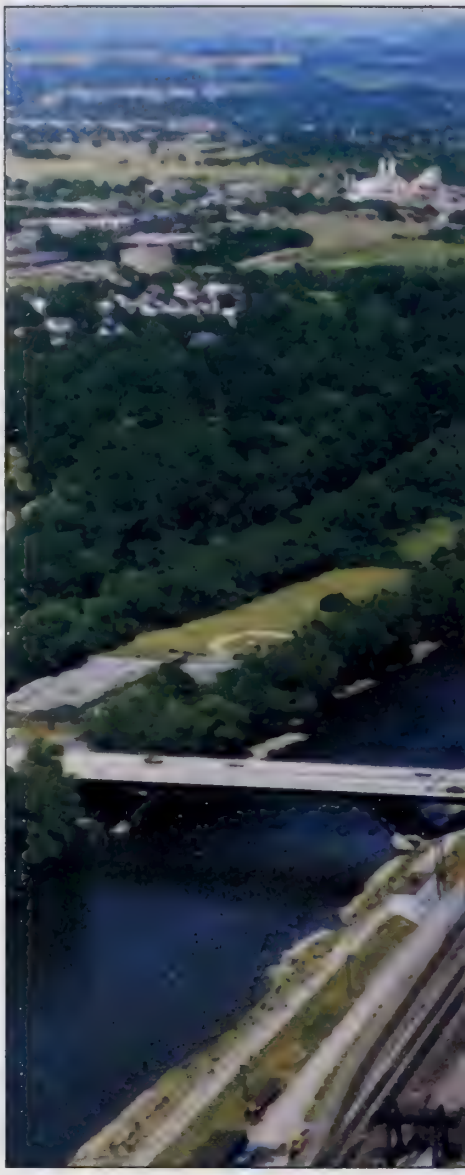
The IBM Personal Computer XT

Bethlehem Steel is no routine basket case. Hemorrhaging? Plainly. But it has a plan, and the nerve to think smaller. Last year's billion-dollar writedown was only a start.

Smaller is better



By James Cook

THE VAST Bethlehem, Penna. plant of the Bethlehem Steel Corp. is a museum of vanishing 19th-century industrial forms—a five-mile-long exhibit of coke ovens, bellied blast furnaces, slag heaps, open hearth furnaces, finishing mills and railroad tracks on display along the banks of the meandering Lehigh River. Looming above everything else is the brooding, incongruously futuristic shape of a 3-million-ton-a-year basic oxygen furnace, which 15 years ago replaced the aging open hearth furnaces that made steel for Bethlehem for 50 years. The stacks of the open hearths are still there, cold, and the furnaces have been turned into storehouses—it would cost too much to tear them down.

In an industry where wasteful work rules abound and a plant more than 20 years old is barely competitive, the century-old Bethlehem plant is a high-cost nightmare. If it were to be built from scratch today, raw materials—coal, iron ore, limestone—would be brought by water, not rail. Raw materials would flow together to make iron and coke, and then steel, and then move on to be milled into finished shapes, in a rational progression from blast furnace to shipping floor. But Bethlehem can't do that, not without scrapping the whole thing and starting over. That is out of the question. It costs too much.

President Walter Williams

But that's the dilemma. Steel is no longer a local product. Bethlehem is no longer competing merely with other U.S. mills of more or less the same character. It is competing with foreigners with some of the largest and most efficient mills in the world, many of them government-subsidized. It is not competing very successfully. Bethlehem lost $498 million from operations last year on $5.3 billion in sales. With another $163 million operating loss in the first quarter of 1983, this year looks no better.

Is Bethlehem then a burnout case? Far from it. Chairman and Chief Executive Donald H. Trautlein, 56, is not the kind of man who sits by and lets things fall apart around him. Neither is President and Chief Operating Officer Walter F. Williams, 54. You can't speak with either of them for long without coming away with the conviction that they are determined to pull old Bessie up by its bootstraps. They have a coherent strategy, and the prospects for success look pretty good. They aim to turn the U.S.' second-largest steel producer into what a modern steel company should be in terms of productivity, quality, service and profitability. Mostly, that involves scrapping obsolete facilities and concentrating on facilities that are still efficient and on markets that are still promising.

They are prepared to pay a formidable price. As a first step, Bethlehem last year wrote off over $1 billion before taxes to cover the closing, sale or liquidation of some 15% of Bethlehem's basic capacity. "We're planning to be a little bit smaller," Williams says, "but a lot better."

Ask Williams how he and Trautlein intend to get Bethlehem back in shape, and he will talk first about Bethlehem's salaried work force—a 40% reduction in personnel in three years and a substantial reduction in wages and benefits for those who remain. He has

Bessie's medley of old and new plants

also negotiated a new contract with the United Steelworkers that will temporarily pare the average wage cost by $1.25 an hour and guarantee the company's labor costs for 41 months. Over the past two years, Bethlehem's work force has dropped over 20,000. The recession, of course, played a part in that toll. Altogether 18,000 jobs will be eliminated from the scheduled plant closings. The Trautlein-Williams objective, however, is not cost-cutting alone. More important, in the long run, is a resolve to end the paradoxically adversarial but collusive relationship that doubled average hourly wages between 1975 and 1982. This put the U.S. industry's hourly wage costs at nearly twice that of the Japanese steel industry's.

Bethlehem cannot realistically hope to match the efficiencies and costs of the Japanese. With their markets growing rapidly, the Japanese were able to concentrate on building new, state-of-the-art steel plants. U.S. producers, by contrast, with production stagnant in most years since 1964, spent most of their available funds trying to modernize what they already had. It was not enough.

Bethlehem, as it happens, did better than most. The newest fully integrated steel plant in the U.S. is Bethlehem's Burns Harbor, Ind. plant, built in 1964. But that's less than a quarter of Bethlehem's present capacity. "Everything the Japanese have is as new or newer than our best," Williams says. Thus, his aim right now is to get Bethlehem back where it was before the yen began to depreciate three years ago. He wants to make it competitive with the delivered cost of Japanese steel in the U.S. In short, he expects to use inherently lower transport costs to overcome higher wage costs. That would give Bethlehem maybe $75 a ton more to work with, perhaps 15% of the present price of steel. "If we can preserve our core plants and our core products," Williams says, "we can compete in our own market with world competition."

To accomplish that, Bethlehem plans to cut its basic steelmaking capacity back to 17.6 million tons by year-end, a reduction of nearly 21% since 1979. That involved some especially hard decisions, particularly the closing of steelmaking facilities at the 80-year-old Lackawanna plant outside Buffalo. It couldn't afford the $300 million needed to maintain it over the next decade, never mind modernize it, without jeopardizing plans elsewhere. "We recognized we have limited resources," Williams says, "and two or three years ago we made a commitment to devote our resources to Burns Harbor, Sparrows Point [Md.] and the Bethlehem plant."

Burns Harbor will now supply coils

for Lackawanna's remaining galvanizing lines, while the Johnstown, Penna. plant will supply raw steel to the Lackawanna bar mill. Burns Harbor's tinplate production will be shifted to Sparrows Point, a move that will triple capacity for making cold rolled sheet for the auto industry.

Such moves reflect management's reading of the steel markets. Trautlein and Williams foresee a permanent reduction in the demand for tinplate from the fiercely cost-conscious container business. They expect reduced demand, too, from the auto industry. "Even if you produced the same number of cars as in some of the high years," Williams says, "the tonnage would be down by maybe a third because of the downsizing." At Burns Harbor, Bethlehem intends to concentrate on high-strength and corrosion-resistant steels for the auto industry—the very steels for which Detroit fears it may have to turn to Japan. Bethlehem won't move into specialty steels, Williams explains, "but we will apply high technology to our basic steel products."

Bethlehem, then, is committing itself to those ends of the market where steel has a conspicuous advantage over other materials—structurals for building, plate for machinery and other capital goods—markets that already provide 30% of its tonnage.

"We had a philosophy of being everything to everybody in every product line," Williams says. The company, as a result, kept a lot of facilities running even after they ceased being competitive. But no more. Bessie has already gotten out of a number of businesses where the prospects are grim: tool steel at Bethlehem, pipe at Sparrows Point, ship repair at Baltimore, Boston, Hoboken and San Francisco. It may get out of others—freight cars, for example—if the markets don't materialize.

Nor is Bethlehem determined to remain a national company. It is withdrawing from the West Coast, where it once dreamed of building an integrated mill. Its Los Angeles structurals and bars plant closed last December. It is even selling off its still profitable Seattle plant, leaving the bulk of the market to the Japanese, who can probably better serve it by water from their lower-cost mills in Japan than Bethlehem can from the East or Midwest. Chairman Trautlein says: "We're planning on both products and markets that offer a very competitive earnings potential."

Williams insists that many of Bethlehem's facilities are already among the best in the world—the Burns Harbor plant first and foremost, whose construction Williams oversaw as a young engineer, and Bethlehem's bar mill at Lackawanna and the coke oven batteries at Sparrows Point.

But there remains much to do. The core of the $750 million expansion program Trautlein announced three years ago is the continuous casting programs in Steelton, Burns Harbor and Sparrows Point. That's the technology by which the Japanese—with 79% of their production continuously cast, vs. 29% in the U.S.—have been able to realize enormous economies in capital, labor and time.

Bethlehem now has only one continuous caster, at Burns Harbor. It should have an $85 million bloom caster in production at Steelton, Penna. later this year. But completion of a $250 million caster at Sparrows Point and one costing $200 million at Burns Harbor is still a few years away.

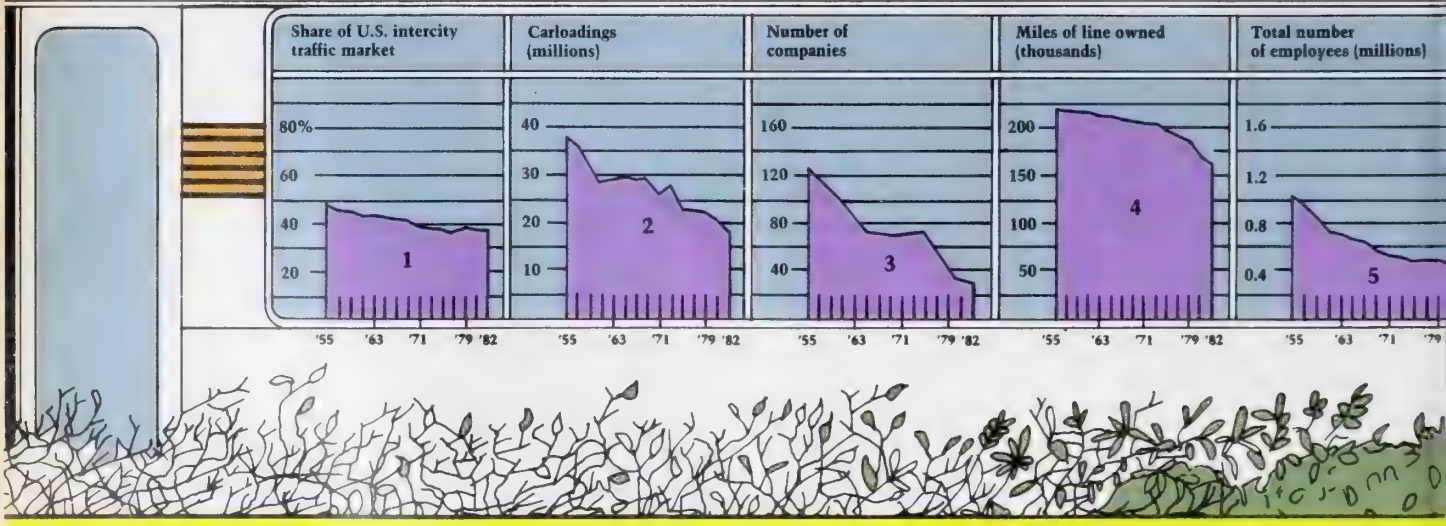
With continuing operating losses sapping its cash flow, Bethlehem is hard put to find the wherewithal to do the job. Last year it planned to spend $550 million to $600 million but was forced to cut back to $470 million. This year it has lowered its sights to between $300 million and $350 million. Bethlehem had also hoped to raise cash by selling part of its 1-billion-ton coal reserves, but with coal at least as much in oversupply as oil, the chances of that look pretty dim.

Still, Bethlehem is not exactly against a wall. It expects to get as

Downsizing an industry

In the mid-Fifties, competition really began to affect both the railroads' share of the transportation market (1) and their volume of traffic (2).

In response, the railroads downsized their operations. Through mergers and technology they reduced not only number of major operating companies (3) but also the num of miles of line (4) and the number of employees (5). T sloughed off their losing passenger operations (6) to the



* 1972-82 represents Amtrak losses only. Note: all 1982 figures are estimates.

much as $200 million from selling the Seattle plant and other assets and maybe $50 million from the sale of tax benefits. Last March it picked up $125 million with its issue of convertible preferred. Though its debt ratio has gone from 26% to 51% from last year's writeoffs, it still has $450 million in untapped borrowing power.

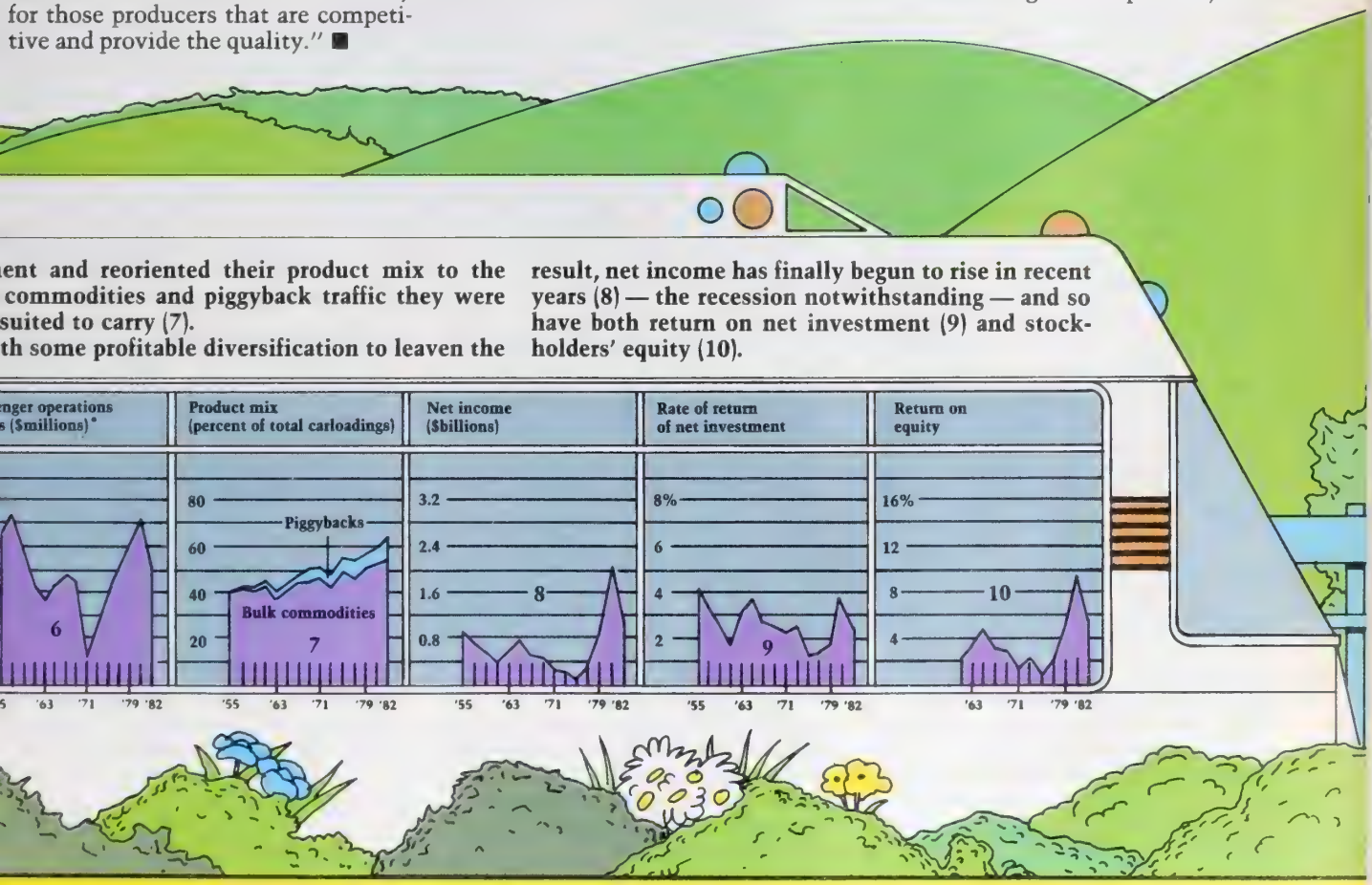
In all this modernization, Bethlehem will be getting a lot less for its money, dollar for dollar, than the Japanese did, and it will be paying a lot higher interest on every cent it borrows. But there isn't really much choice. You either catch up or you have to drop from the race.

Like much of U.S. industry, Bethlehem must wait for a solid upswing in demand to find out how successful its costly efforts will prove to be. Paine Webber's authoritative steel analyst Peter Marcus, for one, believes that the industry could be two years away from a shortage, given an immediate and strong recovery in the Western world. If he's right, companies like Bethlehem will have a great deal of upside leverage, with their sharply reduced break-even points. Bethlehem takes a more cautious but still optimistic view. Choosing his words carefully, Williams says: "There's still going to be a future steel market in this country for those producers that are competitive and provide the quality." ■

An old industry that refused to die

THE ADVOCATES of reindustrialization have a simplistic view of the economic world. They manage to reduce things to an either/or proposition. Either you have a steel or an auto industry operating near peak levels or you have nothing at all, and you are reduced to importing all your steel from Brazil and all your cars from Japan. One would think that no industry had ever successfully downsized its operations before.

Yet that is precisely what the railroad industry has been doing over the past 20 years. That industry came out of the Second World War with 1.4 million employees. Today it employs about 375,000. Yet in spite of this 73% shrinkage in its labor force and the scrapping of lots of track and equipment, today's industry bears about 40% more traffic than the railroads of a third of a century ago. In short, the railroads have downsized substantially and become immensely more efficient in the process. The process was painful but economically beneficial. Without the downsizing, it would cost so much to move heavy freight that our economy could scarcely function. The railroads are now in such good shape that, in a



ent and reoriented their product mix to the commodities and piggyback traffic they were suited to carry (7).
th some profitable diversification to leaven the result, net income has finally begun to rise in recent years (8) — the recession notwithstanding — and so have both return on net investment (9) and stockholders' equity (10).

Source: Association of American Railroads

recession that cut its volume by nearly 15% in three years, the industry as a whole made money. Even long-troubled Conrail—successor to Penn Central and a handful of other bankrupt railroads in the Northeast—finally moved into the black for the second recession year in a row.

Like the steel industry *(see preceding story)*, the railroads had plenty of warning that trouble was coming. They had been losing ground financially since at least 1906, when the Interstate Commerce Commission consolidated its power over rate-setting. They had been losing ground competitively at least since the Thirties, when truckers began to emerge as a faster and more flexible, if inherently more costly, alternative. They really began to go downhill in the mid-Fifties. Barge transport began to boom on the federally subsidized waterways, while the developing federal highway system provided the truckers with subsidized high-speed rights-of-way.

Once the highway program got into gear, the industry not only lost market share rapidly, but for a time faced an absolute traffic decline as well. Oil pipelines took over what might have been a promising growth market in petroleum products, and the triumph of residual oil over coal in the East Coast utility market cost some half-dozen railroads, the Pennsylvania and New York Central most importantly, that traffic which had been the foundation of their profitability.

Because of their regulatory status, the railroads could neither adjust prices nor abandon services and facilities, nor even introduce new services whenever they wanted to. Accomplishing that required a more permissive regulatory commission and a series of congressional acts, including the Staggers Act of 1980, whereby the industry for all practical purposes was deregulated at last.

But from the Fifties on, the quick fix for the industry was mergers. The ICC took a much more indulgent view of mergers than the Justice Department had. As a result, and over the Justice Department's often violent objection, the railroads were able to mount a series of major mergers designed to downsize the industry by eliminating the wastefully duplicative facilities—track, equipment, management—that circumstances had foisted upon them.

The mergers sometimes created huge problems—the bankrupt Penn Central being the most notable—but they ultimately created a number of large regional railroad systems. The Pennsylvania and the New York Central merged and, as Conrail, absorbed most of the major roads in the Northeast. To the South, the Norfolk & Western took over the Virginian, then the Nickel Plate and finally joined with the Southern. The Chesapeake & Ohio absorbed the Baltimore & Ohio and the Western Maryland, and eventually formed CSX Corp. with Seaboard Coast Line (which itself was an amalgam of three major roads). In the Northwest, three long-associated carriers formed the Burlington Northern and went on to acquire the Frisco. Most recently, the Union Pacific absorbed the Missouri Pacific and the Western Pacific and set in motion a series of competitive responses that may create a handful of coast-to-coast systems.

Centralized traffic control at Union Pacific
The diesel was only the beginning.

Along with cost-cutting mergers, the railroad industry went in for a slow but massive mechanization. The triumph of the diesel touched off a series of technological advances that generally served to slim down the industry even further and to increase its overall efficiency. The advances included automatic hump yards to reduce the cost of classifying cars into trains, centralized traffic control that would permit one track to do the work of four, microwave communications, welded rail, electronic car location. Equipment innovations ranged from giant-size covered hoppers for shipping coal and grain to auto rack cars for the shipment of new automobiles. The industry went after economies of scale with a vengeance, so that with fewer and bigger freight cars and locomotives it was able to move ever larger volumes of traffic. There were also service innovations like piggyback, unit trains, and ultimately contract rates that enabled the industry to recover some of its lost traffic and hold on to what remained.

In the end, the industry even succeeded in getting rid of most of its worst losers: less-than-carload traffic through attrition and neglect, the passenger business through government takeover. At the same time, it committed more of its efforts to developing markets where it had inherent advantages—bulk commodities like coal and grain and even piggyback, which linked rail and truck transportation and in effect reduced all traffic to carload lots. In so doing, the railroads still masqueraded as common carriers, but they were no longer offering their services to all comers at fair and reasonable rates. They couldn't afford to. Back when the railroads had a monopoly, the common carrier principle made sense, but not when competitors siphoned off the high-rated commodities that had traditionally subsidized the profitless low-rated ones.

Along the way, some of the luckier or more imaginative companies even made major efforts to diversify into other businesses—and often with considerable success—so that the Union Pacific, for example, is now as much an oil company as a railroad, and Illinois Central more a consumer conglomerate.

There are already signs that the steel industry is reaching for many of the same solutions. Mergers are probably too offensive to antitrust prejudices in Washington, but most old-line companies are reaching out for new technology, cutting back capacity in line with their reduced prospects, and concentrating on products and markets they are suited to serve most efficiently. A few have even eagerly diversified—Armco, for instance, into oil country goods, U.S. Steel into oil.

As the railroad example shows, old industries needn't die, or even necessarily fade away. Sometimes they regroup and slowly come back.—J.C.

Sure some companies are moving factories abroad to benefit from cheap labor, but others are shutting down foreign plants and coming home.

Made (again) in the U.S.A.

Assembling RCA surveillance cameras
Yesterday Taiwan, today Lancaster, Penna.

By John A. Byrne

ATARI IS shifting home computer and video game production to Hong Kong and Taiwan, laying off 1,700 workers in California. Zenith is closing an Illinois plant that makes television parts and moving to Mexico, eliminating 600 jobs. Hardly a week without some similar announcement.The media love to headline such stories. The Decline of America.

But a surprising number of companies, which make everything from semiconductors to auto parts, are shutting down foreign manufacturing facilities and moving back to the U.S. For some reason the media pay no attention to this countertrend. It doesn't fit the clichés. Advances in technology and changes in the production process are responsible for the repatriation of these jobs. Take the production of television sets, an industry that virtually disappeared from the U.S. in the Sixties and early Seventies. Only four years ago the average color TV was packed with about 750 electronic components. Now that number is down to 400, and by 1988 it should be close to 200. With fewer parts to assemble, labor is less important as a percentage of total manufacturing costs. What's more, the gap with Third World wage rates is beginning to narrow. In Taiwan, for example, wages have risen four times as fast as they have in the U.S. in the past 15 years.

North American Philips Corp. is gradually shifting production of its Magnavox, Sylvania and Philco chassis from Juarez, Mexico to a modern plant in Greenville, Tenn. The production line there churns out 850 TV chassis in an 8-hour shift with 11 operators. In Mexico, Philips used "several times" as many workers to get the same output, says Robert Lukingbeal, senior vice president of operations. He also points out that it's easier to attract qualified production engineers in the U.S.—a vital concern these days because of the technical support required by state-of-the-art equipment.

Automation also brings a level of reliability that cuts the need for labor even further. Only three years ago, Philips' soldering defect rate was 70 to 80 per 10,000 joints. It's now down to only 3 per 10,000. "That's a major reason why we're moving production," explains Lukingbeal. "It means we can spend far less money on troubleshooting and repairs before goods leave the plant."

This isn't an isolated situation. RCA stopped producing surveillance cameras in Taiwan last year and moved to Lancaster, Penna. The company, which is winning back the market from the Japanese (FORBES, *Feb. 14*), found that integrated circuits and new manufacturing techniques more than offset the benefits that come from cheap labor overseas, particularly after transportation and the resulting additional inventory costs were considered.

Motorola, meanwhile, is even bringing semiconductor production back home. Last fall, it broke ground for a 142,000-square-foot microprocessor plant in Chandler, Ariz. The facility will employ up to 1,500 workers within two years. "Considering the turnaround time to get the product to our customer, the costs of air transportation and the savings that result from increased automation, we believe it is at least a break-even proposition to do assembly and test here rather than offshore," says Ken Phillips, a Motorola spokesman.

Not all the repatriates are in high-technology industries, either. Ford formerly made automatic transmissions for its Pinto abroad. But now equivalent parts for its replacement model, the Escort, come from a new Ohio plant. Computerized equipment there has greatly increased productivity and quality control.

High interest rates can also make domestic manufacturing more profitable. Apparel ordered or made abroad typically requires six-month lead times and large production runs, while domestic merchandise can be delivered on short notice. That's why Kayser-Roth's Catalina division no longer produces any of its swimwear in the Far East. "The price advantage we got there wasn't commensurate with the lead time, which increased

the risk of guessing wrong and having more markdowns," says Richard V. Figueroa, Catalina's executive vice president.

Then there's Textron's Gorham division. It went to Japan in 1977 to source stainless-steel flatware, but this summer Gorham will begin to manufacture once again at its Providence, R.I. plant. Why did it decide to come home? Gorham had to book orders from Japan six months in advance, which hurt marketing flexibility and caused inventory buildups. "We have the basic skills, and now modern machinery is allowing us to compete with the Japanese," says Gorham President James Thomas. "I think you'll be seeing more returns in the future."

There are other, less quantifiable reasons not to manufacture abroad. "By going overseas, companies add to the complexity of their operations," says Thomas Gunn of Arthur D. Little. "They also expose themselves to a lot of political and business risks that can cause problems."

Look for this trend to accelerate—and without the distortion of economic activity that would result from the imposition of tariffs, quotas and other import restrictions. ■

Paul Volcker is unhappy, but that isn't stopping the state legislatures from tearing down barriers against interstate banking.

States' rights

By Ben Weberman

LAST MONTH Senator Jake Garn's Banking Committee began a series of leisurely oversight hearings on banking deregulation. In due course, maybe next year, Garn plans to come up with legislation.

He had better hurry. In one key area, interstate banking, his committee may be left in the dust—not by overzealous federal deregulators, but by state legislators.

At least nine states, from Alaska to New York, now allow out-of-state bank holding companies inside their borders. Some, such as Delaware, Nebraska, South Dakota and Virginia, ban foreigners from competing with local banks. An out-of-state-owned bank based in South Dakota, for example, can solicit new business anywhere *but* South Dakota.

The Caucus of New England State Legislatures has recommended a further step: a mini-EEC in which any New England bank holding company could operate anywhere else in New England. Massachusetts and Maine already allow reciprocal interstate banking. Another five states, including California and Illinois, have banking legislation in the works. If all these proposals go through, more than one state in three will allow some kind of banking across state lines by the end of next year.

So, is the federal government rushing to reassert its prerogatives against this resurgence of states' rights? Not so you would notice. Except for Federal Reserve Board Chairman Paul Volcker, most of official Washington is content to let the states accomplish what might be much more difficult under the glare of publicity.

Indeed, just about everywhere outside that glare, there is a stronger consensus for deregulation, geographical and otherwise, than Garn's pace suggests. Take a little-publicized conference of 62 business, government and academic leaders last month at Harriman, N.Y. Participants ranged from Garn to SEC Commissioner Bevis Longstreth and Richard Breeden, working chairman of the Administra-

Leading the way

These states either have passed or are considering legislation to allow out-of-state bank holding companies to own banks inside their borders. In most cases, the out-of-staters are limited in the operations they can run. Some states only allow banks from states that allow the same rights ("reciprocal" legislation).

Legislation in effect

State	Year	Operations allowed	Type of entry
Alaska	1982	national/full svc	acquisition
Delaware	1981	national/commercial credit card	new banks
Maine	1978	national/full	new or acquisition/ reciprocal
Massachusetts	1982	regional/full	new or acquisition/ reciprocal
Nebraska	1983	national/credit card	new
New York	1982	national/full	new or acquisition/ reciprocal
South Dakota	1980	national/wholesale, credit card*	new or acquisition
Virginia	1983	national/credit card	new
Washington	1983	national/full	acquisition of ailing banks only

Legislation pending

State	Operations	Type of entry
California	national/full	new or acquisition/ reciprocal
Connecticut	regional/full	acquisition/reciprocal
Florida	1) regional/full 2) national/full	acquisition/reciprocal acquisition/reciprocal
Illinois	national/full	acquisition/reciprocal
Maryland	national/credit card	new
Minnesota	discussion under way	pending
New Hampshire	national/full	acquisition/reciprocal
Oregon	contiguous state/full	ailing
Rhode Island	regional starting 1984; national 1986/full	acquisition/reciprocal
Tennessee	discussion under way	pending

*Amended 1983 to permit insurance.

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tion's Task Group on Regulation of Financial Services. The four-day session, sponsored by The American Assembly, a Columbia University think tank, came up with strong recommendations. Among them:

- All state or federal bans against interstate banking should be repealed.
- Any regulation of financial institutions should be by "functional line"—that is, by product—rather than by type of institution.
- The Fed should get out of regulation and concentrate on monetary policy.
- Failing banks should be allowed to fail, like any commercial enterprise—as long as depositors are protected by government or private insurance. The cost would vary with the quality of the banks' assets—which, of course, the insurers would monitor.
- The Glass-Steagall Act of 1933, which separates investment banking from stock brokerage, should be extensively altered or replaced.
- All usury laws should be repealed, including rate ceilings for bank and thrift deposits.

Senate Banking Chairman Jake Garn
Meanwhile, back in the states. . . .

To be sure, agreement was not unanimous. Trade groups such as the small-banker Independent Bankers Association of America strongly disagreed with the recommendations on interstate banking. The last thing small banks and other financial institutions want is big outsiders stepping on their turf.

This seemingly irresistible rush toward deregulation does not please Paul Volcker and the folks at the Fed. A couple of weeks after the recommendations appeared, Volcker called for a moratorium on bank and nonbank mergers and told the Senate Banking Committee that the states' rush toward interstate banking implies a "reordering of the national financial structure without congressional review and determination."

But Garn will have to move faster if Washington is to recapture control of events. You can't lead a parade from behind. ■

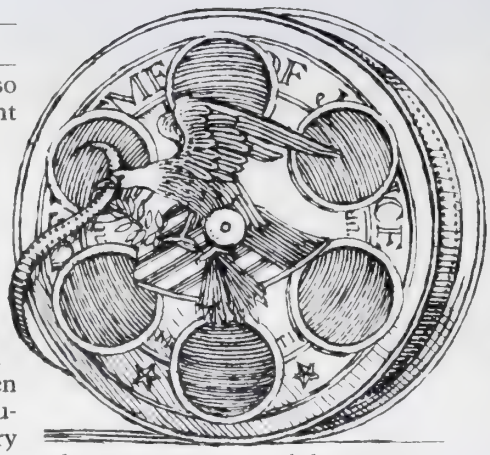
Three entertainment giants want to form a new movie studio. Provided Justice Department antitrusters let them.

No, no, Nova?

By William Harris

WITHIN THE NEXT MONTH OR SO the Justice Department should let the movie industry know if it's going to get its hand slapped for reaching toward the cookie jar again.

The cookie jar in question is the exhibition of movies, control of which would give Hollywood the aspects of a cartel. Some may have thought that was settled in 1948, in the classic "Paramount case," when the Supreme Court decided the studios had to get rid of their subsidiary chains of movie theaters and stop forcing independent theaters to take packages of B movies in order to get A films. But that was over 30 years ago, when the silver screen was king, commercial TV was an infant, and pay TV at best a gleam in somebody's eye.



The Paramount case didn't cover any of these new means of exhibition.

Today, pay TV—both cable and subscription—is a big business. Five years ago, pay services contributed less than 2% of a film's revenues compared with 52% pouring in from the box office. Now, pay is providing some 17% and the theater percentage has dropped 10 points. Hollywood has been sniffing around the edges for several years, looking for a way to get its nose into these new exhibitors' tents.

The latest two sniffs are a new studio tentatively called Nova and a proposed merger between Showtime and The Movie Channel. Movie studios come into the merger between Showtime, a unit of Viacom, and The Movie Channel because the latter is jointly operated by Warner Communications, American Express, MCA and Gulf & Western's Paramount.

Nova, the larger and much more complex deal, was announced last November. It's a $400 million joint venture among Columbia Pictures, CBS and HBO.

The Justice Department must decide whether the joint ventures are innocent new entrants into the entertainment marketplace, which would increase competition, or whether they are agreements between competitors, in effect limiting competition. That's *verboten* under federal laws dealing with restraint of trade.

In many ways these efforts resemble an earlier deal called Premiere, a pay TV venture designed to compete with Time, Inc.'s Home Box Office and set up by Getty Oil in partnership with four studios. Premiere was put out of business in spring 1981, when the courts agreed (on appeal) that studios combining and giving exclusive ancillary rights was indeed a criminal violation of the antitrust laws.

The Showtime deal has three studios jointly trying to extend their reach, so it appears to be on shaky

In the Jaguar XJ6 Sedan great luxury and advanced engineering have been shaped into a form so lithe and elegant that it has been called, by experts, one of the most beautiful sedans of all time. Yet the visual delights of the XJ6 only hint at the pleasures that await its fortunate driver. For it is only in motion that the Jaguar legend takes flight in a swift silent rush of perfectly balanced thrust, response and handling.

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Jaguars have always been preeminent among the world's most opulent motorcars and the 1983 XJ6 carries this pleasing quality a bit further. There is, for example, a new driver's console richly veneered in the same walnut as the dashboard. New seats are faced in the finest and most supple hides, hand matched for the perfection of their grain and color. Electronic conveniences make your journey more pleasant, including a new trip computer that tells you elapsed time, distance and fuel consumption enroute. There is a power sunroof, cruise control, a self regulating heating and air conditioning system and much more. And it is all standard equipment.

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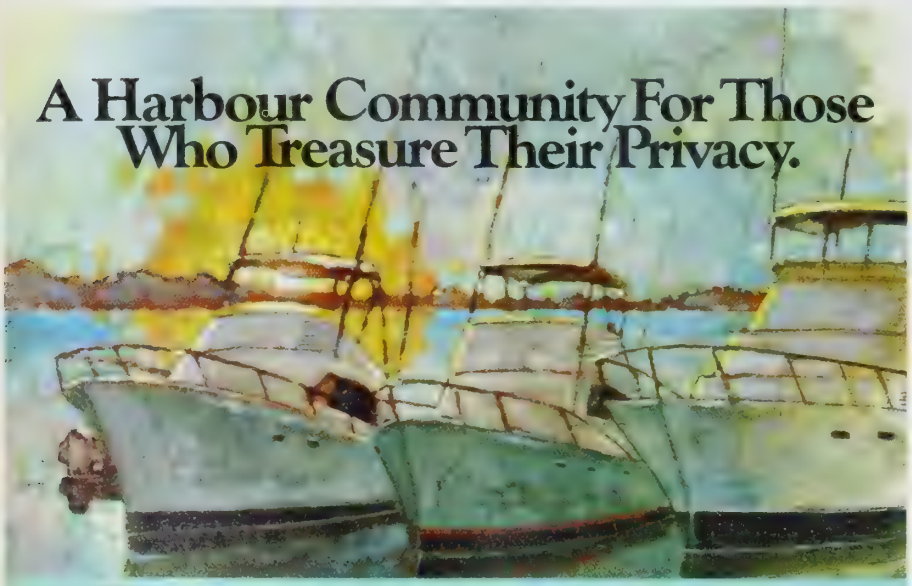

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ground. But Nova, too, would tie up the increasingly valuable ancillary rights.

The Nova situation has an especially touchy aspect of its own, namely the participation of HBO, the IBM of the pay TV industry. With 11.5 million subscribers, HBO would still be about twice as large as a combined Movie Channel and Showtime.

So even if Justice decides Nova is not a cleverly disguised attempt by a motion picture studio to get back into the exhibition business—and it may decide that—there is still the question of whether the competition is being frozen out of the ancillary markets. After all, HBO would have first dibs on all Nova films for pay viewing, and CBS would essentially have the network rights. Exclusivity clauses, remember, are what helped sink Premiere.

The Justice Department must decide whether the joint ventures are innocent new entrants into the entertainment marketplace or whether they are agreements between competitors.

Unlike that earlier deal, Nova is moving cautiously and making no grandiose public statements. Although each of the partners is committed to chipping in $70 million, to be matched by equal lines of credit, little money has been spent so far. Nova has already announced plans to shoot its first film, but it still has no offices and has hired only four people.

That's a far cry from Premiere, which had shelled out an estimated $20 million renting fancy digs and assembling a staff of 60 before the Justice Department said no way.

Don't expect to see any Nova product for at least a year, if at all. But whatever the Justice Department concludes, its decision will have far-reaching consequences for future studio-pay TV mergers.

A delicious irony. With the Justice Department backing away from other antitrust actions left and right, the one industry it seems intent on pursuing is the President's former stomping ground, the entertainment business.

Why all the attention directed at the silver screen? The fact is, Justice has been fighting the movie industry for 30 years, trying to keep it from sneaking back into and monopolizing the exhibition end of the business.

This cookie jar is being watched. ■

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How to create your own economic boom no matter where the economy's heading

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Read on, ask us questions.

An absorbing short story about Scott Paper's relationship with GECC

Increasingly, new business comes from clients who feel we've created attractive financial packages for them in the past.

> *With Scott's permission, we thought you might like to have a peek at the underpinnings of two packages constructed by GECC that increased the efficiency of the paper company's financial resources.*

The first transaction was for a cogeneration plant in Maine that used wood chips as its primary fuel to generate steam for Scott's operations and electricity for sale to others. GECC recommended financing the facility with a structure like a leveraged lease.

Two basic steps were employed for the $91 million project:

1. GECC invested $47 million in the 25-year financing.
2. Separate public offerings of $7 million in long-term tax exempt bonds and $37 million in long-term taxable debt were arranged by a major investment banker.

GECC was then awarded a second piece of business. This transaction, also in Maine, was a leveraged lease financing of a fiber recycling plant that processes waste paper into pulp for Scott paper products—much more cost efficient than producing the same products from timber.

The basic steps in the second GECC financial package were similar to the first, with GECC contributing $13 million in equity and leveraged lease debt being raised through public offerings.

GECC's work on the second transaction took a mere 28 days to complete. Two reasons why GECC is able to move so fast is that we have so many options at our disposal and are not overly regulated when we use them.

ONE GECC PROJECT LED TO ANOTHER WITH SCOTT PAPER. We helped Scott finance a cogeneration energy plant to produce steam and electricity from burning wood chips and coal. Later, we designed a leveraged lease for Scott's fiber recycling plant. Together, the two financial packages constitute a commitment of approximately $60 million.

No pizza pie-in-the-sky talk: GECC's $30 million line of credit to Eastern Milk for two mozzarella cheese plants

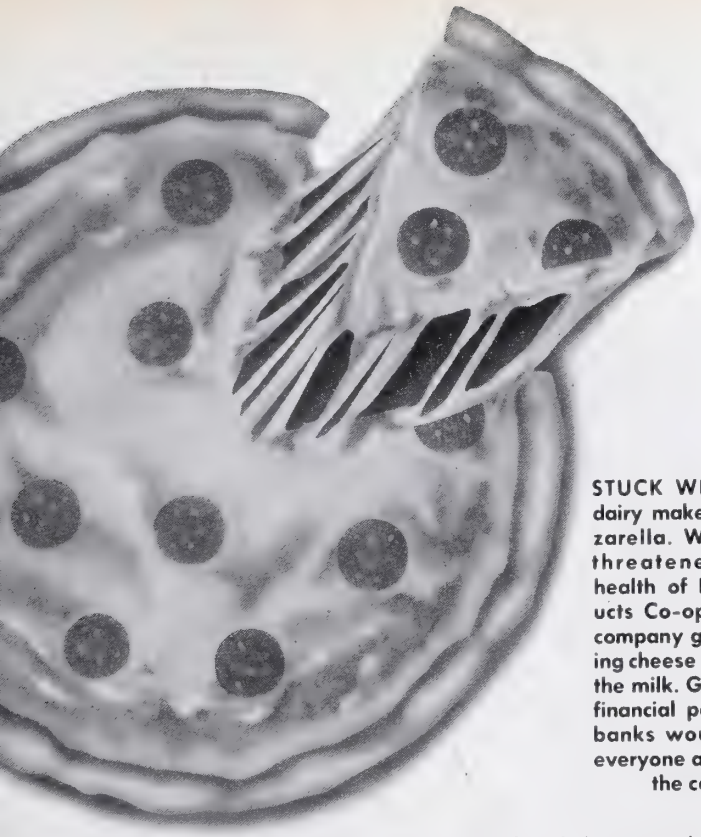
Offhand, you wouldn't think healthy cows would give the largest dairy cooperative in the Northeast a serious financial headache. But Eastern has to market all of the milk their farmers produce.

It began when the cows of Eastern Milk did what healthy cows do in spring and summer: give birth to calves. Nature and school boards added to the pain by doing what *they're* supposed to do.

> *Nature increased the herd's lactation by 25%—normal. The school boards let the kids out for vacation—the law. Result: milk demand plunged.*

Disposing of surplus milk was costing the dairy millions a year, requiring additional contributions from its 3,500 member farms. The farms understandably balked—and membership began declining when Eastern got the bright idea of converting milk into mozzarella. They purchased two cheese plants.

The plants, however, needed to be expanded and equipment needed modernization. Capital was short. Banks were delaying action on Eastern's request. Enter GECC.



STUCK WITH MILK, co-op dairy makes 100% real mozzarella. When surplus milk threatened the financial health of Eastern Milk Products Co-op Association, the company got the idea of buying cheese plants to dispose of the milk. GECC put together a financial package—when the banks would not—that had everyone at Eastern, including the cows, mooing.

'irst step in the Eastern Milk transction: We sent a detachment of our ield people to evaluate the company. 'hey are specialists in every aspect of usiness, including cows!

GECC's experts discovered that rospects for Eastern's cheese plants vere good and that Eastern could reatly improve its borrowing power y improving its accounts receivable illing and improving its collection rocedure.

We recommended a computerized eceivables program for the dairy. We hen provided them with Industrial Revenue Bond guarantees of $6.5 nillion. And because we believed the uture did look so bright, we extended Eastern a total line of credit of $30 nillion for more expansion. Headche cured.

So if you live in the Northeast, chances are you've enjoyed a pizza pie made with 100% real mozzarella from Eastern milk products. And as a result, cooperative, cows and calves are doing very well indeed.

Sour condominium market no obstacle as GECC finances one of the largest conversion projects in California history

Vhat our competitors in the real state market often consider a risky vay of doing business, GECC thinks f as innovative and flexible.

The difference between us is vell illustrated in the Shelter Creek condominium project we recently financed in San Bruno, California. Shelter Creek Company faced two seemingly insurmountable problems.

One, end loan money in California had all but dried up. Two, most lenders were out of the conversion financing market because of lagging sales caused by the first problem.

Undismayed—you will have a hard time working for GECC if you ever are—we backed Shelter Creek because we believed it to be a sound project that would bear fruit.

With our commitment, Shelter Creek Company was able to secure a municipal tax exempt bond issue and provide unit buyers with attractive low interest rate end loan money. GECC created two loans totalling $38 million for the project, large by any standard, even in the best of times.

Shelter Creek Company got its bond issue financing and so was able to compete very favorably with neighboring condominiums because *its* buyers could obtain below-market mortgages.

Four other big deals that demonstrate why GECC is one of America's largest diversified financial services companies

Some highlights. For details on these and other financial packages arranged by GECC, mail coupon.

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Creating Money for Business

Ames Department Stores has found true happiness—profits, growth and plenty of customers—out there in the sticks.

Cornering the market

By Aaron Bernstein

AMES DEPARTMENT STORES, INC. is a smallish ($423 million sales) discount chain whose stores are tucked away in little backwater northeastern towns you have probably never heard of. Places like North Tonawanda, N.Y.; Ossipee, N.H.; and Sayre, Penna. But the Rocky Hill, Conn.-based retailer gets along just fine. It applies the Wal-Mart method of cornering the market in rural and suburban towns where competition is slim *(see* FORBES, *Aug. 16, 1982).*

Earnings per share over the past five years have grown, if not quite at Wal-Mart's blistering pace (40%), at a nevertheless very respectable 17%. And that was after dilution from an 800,000-share offering in April 1982. Return on equity averaged 18%; long-term debt, about 48% of capital.

The technique is to open or acquire stores in nonmetropolitan areas, population 10,000 to 20,000. As with Sam Walton of Wal-Mart, who is a friend of Ames CEO Herbert Gilman, this allows Ames to be the big fish in a small pond. The small towns have enough people to sustain one good-size discount retailer, but not usually a second one. Clearly, the Wal-Mart concept is transportable.

Small-town dominance has allowed Ames to grow by leaps and bounds since Herbert Gilman's two brothers, Milton and Irving, opened their first 6,000-square-foot store in 1958, with $30,000, half of which came from a mortgage on their mother's farm.

Today Ames operates a chain of 127 stores, which average 45,000 square feet, stretching from Maryland to Maine, including 9 opened so far this year. Herb Gilman, who became president in 1976 and CEO in 1981, when his brothers retired, is now acquiring 42 King's stores in the Northeast from KDT Industries, which is reorganizing under Chapter 11. If approved, that should add over $150 million to Ames' revenue base.

Ames pays one price for its rural locations: Sales per square foot were $85 last year, while the industry averaged $108. But there's a good business reason behind paying it. Explains 58-year-old Gilman, "The point of Ames is that people don't have to travel to the city to shop. So we have to carry everything in order to hold on to our customers. This means we don't turn so well, but it keeps people happy."

An Ames department store in Southwick, Mass.
Keep the customers on Main Street.

Nowadays Ames finds it increasingly hard to avoid the K marts and Caldors of the world, which are venturing more frequently into the boondocks. But the other ingredient of Ames' success, close management that holds costs to a minimum, has kept both competition and margin problems at bay. Ames' expenses run consistently below the industry average, and its gross margins of 30% are 2% above the industry's.

The brothers were adept at keeping expenses down from the beginning, when they opened the first five stores in old mill buildings where the rent was cheap.

Since his brothers left two years ago, Herb Gilman has kept that adeptness but moved aggressively to put his own stamp on things. Like his remodeling program, which refurbished 3 stores in 1981, 13 in 1982 and 8 so far this year. Next year 15 more are planned. By installing racks that are taller and narrower, Gilman is able to display 20% more merchandise. He also upgraded the product line. Sales in the remodeled stores increased by about 25%.

Gilman has put in point-of-sale terminals, which should soon be in all stores, to feed the computer he installed in the Rocky Hill headquarters to monitor costs, inventory and sales.

Lately, Ames has taken to asking customers their zip code when they make a purchase. This lets Ames gather detailed information about specific customer areas around each store. Ames can then target its advertising, which is done almost entirely through direct-mail circulars. It sends out some 50 million pieces of mail each year.

Then there's warehouse capacity. About 80% of Ames' merchandise is drop-shipped from the company's warehouses, with the rest coming from outside suppliers. The two main warehouses, in Worcester, Mass. and Secaucus, N.J., have had computer-controlled conveyor-belt delivery systems put in. With the Secaucus center, bought last year, Gilman reckons he can handle over 300 stores.

Thus Gilman has put Ames in a position to keep growing. He plans to increase sales up to 20% a year, 10% of that from new stores and 10% from increased productivity through remodeling. And that doesn't count acquisitions that might come along, where Ames has a good record of picking up stores cheap from failing companies. Ames acquired 23 Neisner Brothers stores in 1978 at a below-market price, for example, and got tax-loss carryforwards that about equaled the purchase price. The KDT acquisition, which promises to have over $50 million in carryforwards, could work out nearly as well. Now if Gilman can just find some more great markets, like East Aurora, N.Y. ■

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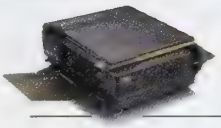

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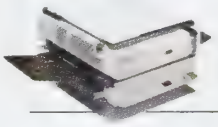

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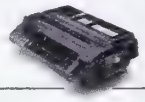

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1983 Canon U.S.A., Inc

American Agronomics is supposed to make fruit juice. But when a cash crunch hit and Carl Lindner saw a bargain, shareholders got squeezed.

Orange crush

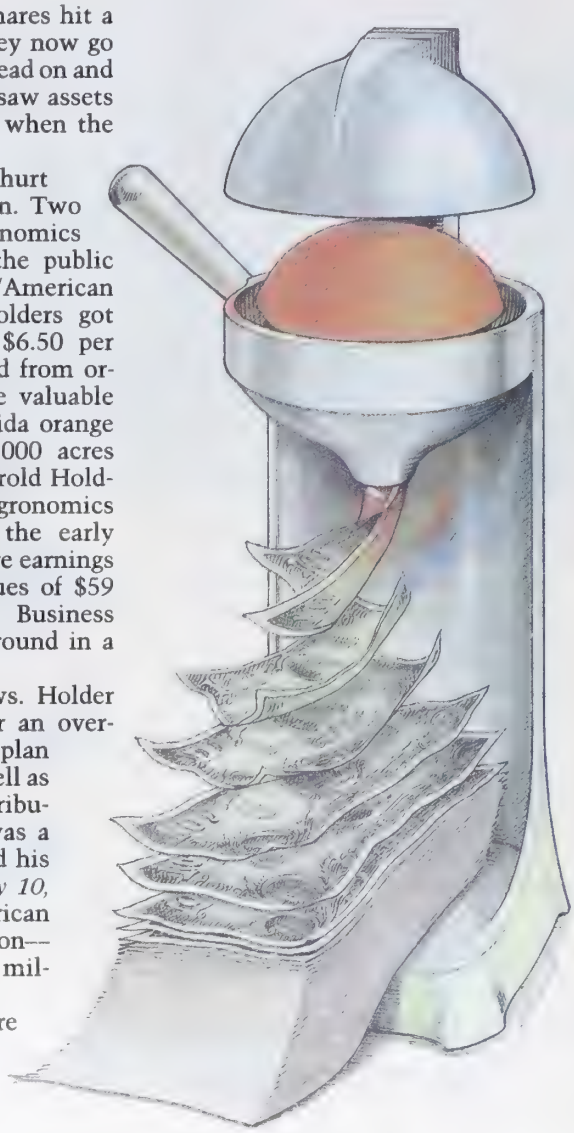
By Pamela Sherrid

THE NEXT TIME your broker brings you a hot tip on a small company, remember the saga of American Agronomics. This Tampa-based orange juice producer was once a Wall Street darling. Its shares hit a high of 8¾ in 1981, but they now go for a mere 1¾. Why? Well, read on and find out how stockholders saw assets squeezed away from them when the going got rough.

As usual, the investors hurt worst were the last ones in. Two years ago American Agronomics raised $13 million from the public with the help of Shearson/American Express. The new shareholders got 10% of the company at $6.50 per share. The sales pitch: gold from oranges. Working with some valuable assets—9,500 acres of Florida orange groves and control of 15,000 acres more—Chief Executive Harold Holder had guided American Agronomics from near-bankruptcy in the early Seventies to the point where earnings hit $5.7 million on revenues of $59 million in 1980. Harvard Business School heralded the turnaround in a case study.

Then came the bad news. Holder began to pay the price for an over-ambitious diversification plan that included synfuels as well as juice packaging and distribution. The coup de grace was a winter freeze that slammed his orange groves (FORBES, *May 10, 1982*). Last year American Agronomics lost $18 million—89 cents per share—on $63 million in revenues.

So far, so bad. But here comes the real trouble. The 1982 freeze left American Agronomics' trees severely damaged; tons of fruit were rotting on the ground. With less to sell and money draining away into unprofitable sidelines, Holder was in a cash crunch. Bankers began grumbling and insolvency loomed again.



Enter Carl Lindner, sharp-eyed investor, sometime corporate raider and eventually American Agronomics' friendly loan shark. Holder had met Lindner socially several years before. Critically in need of financing, he got on a plane and flew to Cincinnati, Lindner's home base. "Carl came down to see the groves right away, and a few days later we had an agreement," Holder says.

Being quick to grant credit to risky borrowers, however, brings considerable leverage. Lindner's terms were great for him and lousy for other shareholders. His American Financial Corp. lent American Agronomics $17.5 million, taking as collateral almost all of the company's orange groves—appraised after the freeze at $25 million. So much for the downside. As a kicker, Lindner received warrants that let him change that debt to new equity at $1.07 a share, a 34% discount from the then market price. His potential: 44% of American Agronomics' stock.

It's possible that American Agronomics' shareholders might have fared better if Holder had accepted the embarrassment of bankruptcy. The value of their shares would then have depended on his ability to negotiate with existing creditors. "Going to Lindner was an easy way for Holder to save face," says Richard Lilly of Raymond James, a Florida brokerage firm.

The dilution from the Lindner deal will hurt Holder, too. He owns 19% of American Agronomics' stock. The turmoil also derailed Holder's plan to let Kenneth Barnebey, the former head of Tropicana, take over as chief executive. Barnebey had the unenviable luck of coming on board one week before last year's catastrophic freeze. Now the company cannot afford to pay him the salary that he was promised—$350,000 minimum—so Barnebey has agreed to full-time "consultant" status.

Lindner, meanwhile, is enjoying the fruits of what may prove to be a very profitable investment. In January, when the company needed yet more cash, he lent it another $3.5 million. But American Agronomics says its groves have made a surprise comeback, thanks to this winter's mild, wet weather. Appraisers now assess the trees' worth at perhaps $44 million, and the company could make a profit next year.

Not a bad gain from Lindner's quick decision to put up $17.5 million. The other shareholders? Unfortunately, very little of American Agronomics' good fortune will trickle down to them. ■

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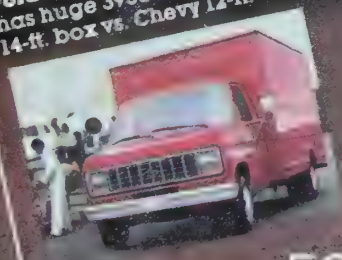

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BUILT FORD TOUGH

The U.S.-Mexico border industry is doing well. So why tamper with a good thing?

Constructive criticism

By Toni Mack
with Jessica Greenbaum

THERE ISN'T MUCH to cheer about in Mexico these days, but at least one part of the economy is thriving: the *maquiladoras*, the 574 assembly plants that are almost all U.S.-owned and situated mostly on the border from Tijuana to Matamoros. These plants, which assemble components shipped over from the U.S. and return the finished product under special tariff rules, will provide Mexico this year with at least 124,000 jobs and an estimated $1 billion in desperately needed foreign exchange. That's as much as tourism contributes.

In return, inexpensive Mexican labor is giving U.S. companies competitive strength. "With the foreign competition we were facing, we had to fight," says Len Malecki, head of carbon resistor manufacturing for Allen-Bradley Co. "We had to leave Milwaukee and go to Mexico. Now we're the sole domestic source of some of these resistors. Everyone else went out of the business." Eaton Corp. sells Matamoros-made electrical switches to Japan.

Last year's peso devaluations, while wiping out the profits of many U.S. operations in Mexico, aided the *maquiladoras*. Labor costs, paid in pesos, are less than $1 an hour now, compared with $1.65 last year. That's below "almost all countries in Asia," says Richard L. Bolin, director of the Flagstaff (Ariz.) Institute and a longtime proponent of border industry.

Proximity can be as important as wages, says Ralph W. Smith, whose subcontracting company makes magnetic transformers in Matamoros for such big outfits as Texas Instruments and GTE Corp. "We're in an industry where turnaround time is important," says Smith. "That's not compatible with 30 days on the boat from Taiwan." In short, it's a good partnership. "We need each other," says Clark Reynolds, an economist at Stanford University.

But after 18 years of the *maquiladora* program, first negotiated during Lyndon Johnson's and Gustavo Díaz Ordaz' administrations, there are stirrings of discontent. On the U.S. side of the border, critics like Antonio Sanchez of the Amalgamated Clothing and Textile Workers Union and El Paso, Tex. Councilwoman Alicia Chacon accuse U.S. companies of exporting jobs. Meanwhile, in Mexico, where the government had anticipated more high-skilled, high-paying jobs and more opportunity for Mexican suppliers, there is resentment. In Juarez *maquiladora* workers describe some of the assembly operations as *empresas golondrinas*, swallow-companies that fly away in the night leaving workers unpaid. The women workers, who constitute by far the majority of line workers, know they have been hired because, in the words of *maquiladora* managers, they're "better at hand work" and "not interested in higher pay." The line worker at Allen-Bradley's Juarez plant who corrected a problem that baffled engineers and who is now an industrial engineer, thanks to company-paid schooling, is regarded as an exception.

Part of the problem, of course, is attitude. Mexico is impatient to be, if not another Japan, at least a Korea, Taiwan, Hong Kong or Singapore. On the U.S. side, social critics who never question the Asian labor that produces the low-price garments in Sears or K mart take umbrage when that labor is close by and visible.

But calling the problem one of attitude is not to dismiss it. It may very well be past time that the *maquiladoras* became something more than solely low-wage, low-skilled operations. Joseph Grunwald, an economist with the Brookings Institution,

Workers at Allen-Bradley Co.'s carbon resistor plant in Juarez
Jobs and dollars for Mexico, competitive strength for the U.S.

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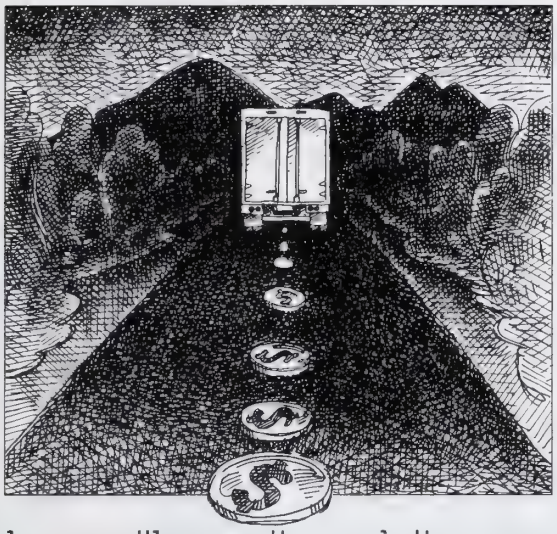

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says U.S. manufácturers should take the initiative in bringing in Mexican partners and offering technical aid to potential suppliers. "It's crucial," says Grunwald, "because in the long term, if this activity remains an enclave, it will become more and more politically unpopular."

What can be done? A recognition that the U.S. and Mexican economies are far more integrated than we admit would be helpful, says Stanford's Clark Reynolds, who directs the U.S.-Mexico Project on Economic and Social Relations. "It's in the interests of both countries to create a regulatory framework—not totally free trade, but not the levels of protection we have now—for a step-by-step pooling of markets," he says. Reynolds suggests bilateral discussions to explore, industry by industry, how production might be shared. Any final trade agreement should include exchange-rate provisions and "some assurance to both parties that once they begin to invest in both markets, the door won't be slammed."

But if governments are thinking about such changes, the private sector is already moving on them. Eaton Corp. is actively seeking a Mexican company to do metal stamping or provide plastic or wire; Eaton is willing to supply molds, machinery and technical expertise. And General Electric's 14 *maquiladoras* are developing naturally into self-sufficient and innovative Mexican companies. Edward M. Nicoletta, who runs GE's lamp assembly plant in Juarez, explains: "The original concept was straight assembly—a work table, some wooden benches, and you attach Part A to Part B. No technology. After about seven years of this we realized the capability was there to come close to the same operations we have anywhere else. Now many of our Mexican plants manufacture the parts to assemble. The third step, as I see it, is a complete integration into Mexico, buying from and selling to Mexico—if the custom laws were changed."

The bald facts are that the two economies are intertwined. A healthy Mexico is the U.S.' best customer. The trade surplus with Mexico reached $3.6 billion in 1981, before the peso devaluations. And a struggling Mexico is the U.S.' largest supplier of impoverished immigrants, an estimated 500,000 yearly. Critics of the *maquiladoras*, who prate about U.S. companies exporting jobs, do not or will not understand the situation. But wiser people on both sides of the border know how much, now more than ever, we need each other. ■

"We're proud of what we've won"

Life can be hard on the first rung of the ladder. "We have no options," says a 26-year-old *maquiladora* worker who assembles videotape cassettes 48 hours a week and shares her weekly take-home pay of 3,180 pesos (about $21.50) among her parents, husband and two children. She and other women among Juarez' mostly young, mostly female *maquiladora* work force asked that names not be used, for fear of retaliation. Each has as many as 50 applicants lined up for her job.

These women worry about layoffs—one notes that they occur most often just before vacation pay is due—and sickness from the solvents used to clean machinery and materials. "Some women get nauseous and dizzy," says a 21-year-old woman who works on an electronic components assembly line. "They even faint on the line. We've talked to the manager about it, and they do nothing."

At work on a maquiladora *assembly line* ***Taking home $21.50 a week.***

The complaints, in one way, are a sign that Mexico has joined the 20th-century industrial world: vacation pay, occupational health hazards. Patterns emerge. Already, in Matamoros, 814 miles away in Mexico's northeast corner, the *maquiladora* assembly plants *(see story)* have been unionized. This has meant a 49% higher cash wage than in Juarez, and, within two years, Matamoros workers will probably drop from 48 hours to 40 hours weekly. The union is also considering asking for a company-paid basket of consumer goods, mostly foodstuffs.

In the cash wage (and other *maquiladora* operating expenses) the Mexican government has a good thing. Mexican banks change *maquiladora*-imported dollars at the controlled rate, now about 110 pesos per $1. But $1 is worth 148 pesos on the market, and the difference goes to the government-owned central bank, Banco de Mexico. (This is what the law requires; in practice some *maquiladoras* illegally buy their payroll pesos at the free rate.) For its part, the Mexican government subsidizes food staples so that 66-peso-per-hour workers can afford to buy them.

Such calculations in high places are far from the daily concerns—some poignant, some brave—of the women working in Juarez. These women may be their families' sole support, and often they make more than employed husbands, fathers and brothers. "Sometimes they try to take vengeance on us," says the electronics assembler, whose paycheck helps support eight people. "They think our work is the cause of their unemployment."

The women are conscious of opportunity. A woman who sorts coupons for a clearinghouse, a dreary, low-skilled job, cites a worker at her plant who worked up to computer operations and then got a better job at a Mexican bank. Sometimes they give opportunity to others. "The majority of the women who work at the *maquiladoras* work to send their brothers to school," says one. Going to school themselves is harder. "We're so tired we just want to go home and go to bed," she says.

Building a better life? Most of the women FORBES interviewed said they wouldn't quit even if they could. "We couldn't go back to not working," says the electronics assembler. The woman from the videotape cassette plant agrees: "We're proud of what we've won, even if we don't make more money." Something powerful is at work on the Mexican border.—J.G.

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How Kenneth McCrady of Ennis Business Forms learned there's no place like home.

Return of the native

By Toni Mack

ENNIS BUSINESS FORMS reminds you of the country boy who went off to the big city, only to learn that life back home was better.

Seven years ago Kenneth A. McCrady, Ennis' chief executive, forsook his established small-town market to pursue faster growth in computer-forms sales. "We said, if we're going to be a major force in business forms, we've got to go to the major metro areas, where the computers are," says McCrady, a mustached, tobacco-chewing Texan. "We'll cut prices, promise delivery, do whatever we have to do." But Ennis was a small fish in the $4.5 billion forms industry, and the company got tromped on. "That's when we sat down and decided this ain't the right ball game," McCrady drawls.

The right ball game, as it turned out, was to be found in places such as Novelty, Ohio and Puyallup, Wash. By hawking sales books, "snap-apart" forms and restaurant checks through dealers in the countryside, McCrady has raised per-share earnings by 413% in the past five fiscal years on a mere 40% growth in revenue. Return on equity has averaged 22%. Ennis' 7.4% net margin is among the best in the industry.

"A lot of our dealers do $1,000 or less a year with us, and that's fine," says McCrady, feet propped on his desk. Ennis' average order totals only $400, which buys a six-month supply of forms for customers such as Doty's Furniture of Kosciusko, Miss. Handling wee orders is costly. It can take 45 minutes to set a printing press for a 5-minute run. But Ennis' small customers escape the notice of industry leaders, including Moore Corp., Standard Register and Wallace Computer.

Kenneth A. McCrady, chief executive, with a few examples of Ennis Business Forms' output
Small-town customers, such as Doty's Furniture, Kosciusko, Miss., escape the notice of Ennis' competitors.

Those suppliers field batteries of salesmen. But Ennis sells through dealers only. Most are printers, stationers and paper jobbers who peddle forms as a sideline. The dealers spare Ennis the cost of sending salesmen through sparsely populated country, and small-town dealers more easily win the custom of small-town business proprietors. A typical Ennis dealer, says Robert L. Mitchell, vice president-sales, "is active in the Boy Scouts. He goes to your church. He's a member of the community. When you buy from him, you know whom you're dealing with."

And by selling through dealers only, Ennis commands dealer loyalty. The dealers don't have to worry about Ennis salesmen tackling their customers. "If a company has both dealers and direct salesmen, I don't even want to talk to them," says Marion Perkins, whose Ruston (La.) Office Supply has sold Ennis forms for 20 years. "The salesmen may try to undercut me."

Oneita Riggs of Riggs Advertising Supply in Alva, Okla. (pop. 6,450) has done business with Ennis since 1954. "Because they're faithful, that's why," she says. "You can depend on them. If someone's faithful, you stay with them."

Says Bill Furth, a purchasing agent for Kemske Paper Co. of New Ulm, Minn.: "If a customer calls and says he just ran out of forms, I can call down to the De Witt, Iowa plant and talk to the manager—very seldom can you talk to the top man like that—and there's a 75% or better chance he'll move up the shipping date. Nobody has adjusted their production schedule for us as much as Ennis."

On the other hand, when times are tough, dealers hustle their main lines harder, to the detriment of their Ennis sidelines. So in fiscal 1983, ended Feb. 28, Ennis' earnings of $7,202,000 amounted to an increase of only 6% a share, to $3.60, on sales of $90,933,000.

For McCrady and his company, the small-town market is a natural. The company's hometown, Ennis, Tex. (pop. 12,900), hugs the prairie 30 miles south of Dallas. It's an easygoing place where McCrady, who grew up on a farm a few miles west, can farm and raise "mighty cute" quail to train his bird dogs. An accountant by training, McCrady, 52, was a partner in Peat Marwick's Dallas office when Ennis Business Forms hired him in 1970 as chief financial officer. He became chief executive the following year.

McCrady pushes productivity. Six years ago he began testing his adapta-

tion of an obscure productivity program known as the Scanlon Plan. It works this way: If labor costs run, say, 30% of sales, and plant workers bring that down to 25%, they get half the savings. In a test plant, productivity rose 33% in three years. McCrady now has the plan in all but one of his forms plants, but he has trouble making it work when sales are slow: "You can't get people to work harder to get laid off," he says.

Ennis still gets about 30% of its revenues from big-city markets, selling through professional forms brokers. But it mostly refuses price breaks and special delivery schedules, and it confines itself to turf that the big boys aren't going to get combative over, such as sales books. "Most of the major companies don't even make them anymore, because it's probably a declining market," says McCrady. "That's all right. It's still very profitable for us."

But where's the growth? In computers, perhaps, especially now that they are increasingly popping up in small towns. "Computers are both a threat and an opportunity," says McCrady. "They tend to use a lot more forms, but they displace a lot of other ones. Chances are we're making the form that's being displaced." Yet he's betting on opportunity: Ennis' new $3 million plant, its twelfth, makes nothing but computer forms.

If McCrady finally gets to ride high in the computer market, it won't be because he blindly sought what's hot. He will owe his success to having pampered his customers so that they will buy computer forms from Ennis. Down in the heartland's towns, Ennis is prepared for a long stay. ■

The Up & Comers

Having slashed shoplifting in department stores, can Sensormatic do the same for supermarkets, hardware and liquor stores?

Stopping roast rustlers

Sensormatic's Ronald Assaf
Shoplifting can be profitable.

By Jane Sasseen

Honest citizens are making money from shoplifting, too. Take Sensormatic Electronics Corp. in Deerfield Beach, Fla. Sensormatic, with revenues of $67 million, has prospered by selling those funny-looking white plastic tags attached to high-ticket items in department stores. Sensing devices at store exits detect a tag on an item carried out of the store, which discourages shoplifting. Only a store employee can remove the tags without ruining the merchandise, and the system has reduced shoplifting by as much as 70%.

But there are only so many shoplifters and so many department stores willing to pay the $35,000 that an average sensing system costs, and Sensormatic, with 75 of the 100 largest department store chains as customers, already dominates the market. What to do for an encore? The company's new market is, literally, the supermarket. Surveillance systems have only slowly followed thieves into grocery outlets, and supermarkets now lose about $1 billion a year to shoppers who stroll away with hams or rump roasts hidden by bulky clothing. Ronald Assaf, 47, president and chairman of Sensormatic, expects to do enough business with supermarkets to permit Sensormatic to grow about 30% a year, only a little less than its past average.

So far, about 350 SensorGate systems are in 35 stores, and Assaf says losses have shrunk by 50% to 60%. Grocers attach magnetically sensitive labels to high-priced items. At cashiers' stations, clerks put legitimate purchases right into grocery bags, bypassing the sensor. But there is a gate at the end of the checkout counter with a sensor attached. As the customer passes through, any hidden items will set off an alarm. The sys-

tem works much like the metal detectors at airports.

The gate, however, costs about $4,000 to buy or $100 a month to lease; the average U.S. supermarket would require ten gates. Then there are the labels at around 3 cents apiece and the labor, about 15 man-hours a week, to apply them to goods. The cost does limit the market. Ronald Cooke, director of loss prevention for Maryland-based Giant Food, estimates about 25% of the chain's stores could cut losses enough to make installing the system profitable. Big savings come in other security costs. Where Giant Food has tested the gates, Cooke says, the chain has reduced its security force by 80%.

Consider also one more bit of basic grocery store arithmetic. Net profit averages slightly under 1% of sales for supermarkets. Yet the stores lose an average 0.5% to shrinkage. Even a small reduction in theft measurably increases profit margins.

Sensormatic's technology, moreover, can work in any kind of retail establishment. Assaf has his eye particularly on hardware and liquor stores and, outside retailing, "anyone who loses products," he says. Companies that use computer tape, for example, or that manufacture cameras or videocassettes.

Further afield, Assaf envisions Sensormatic in the entire business of inventory control as a one-stop shop for loss prevention. Sensormatic is negotiating to buy a closed-circuit television camera company, and Assaf intends to buy and remarket computer terminals used by grocery and hardware stores to keep track of stock. In other words, he wants to sell you the terminals to count your goods, the cameras to watch your employees unload them and the surveillance systems to make sure your customers don't walk away with the store.

Assaf, who once managed a grocery store in Akron, Ohio, can easily afford to diversify. He is sitting on $60 million in cash and will have little debt after he converts $50 million in bonds into common stock this summer. Wall Street, for a change, has remained high on the stock, even during last year's wimpy market. Sensormatic recently traded at 37 times earnings. "This is a company that makes very few mistakes," says John Westergaard, president of Equity Research. "They've always produced more, and better, than even an optimist could have expected." Good reason to look for success as Sensormatic tries to steal away with another barely touched market. ■

The reluctant CEO

Charles Muench Jr., founder of three small computer companies, said a year ago that he "didn't trust" himself to run the companies he started *(see* FORBES, *June 7, 1982).* As it turns out, he has not trusted anybody else for long, either. Muench has just lost his third president and CEO at his ten-year-old Intelligent Systems Corp. And the new CEO is none other than—you guessed it—Charlie Muench.

The latest departure is that of Peter Curnin. He left when ISC, a maker of colorgraphic computer terminals and software in Norcross, Ga., merged with Quadram, a microcomputer firm, to create a company with estimated fiscal 1983 (ending May 31) sales of $35 million, up 43%.

"Peter had a very conservative management style that differs with Quadram," says Muench, 46. "He saw the difference quicker than I did and felt he wouldn't have been able to work with Quadram because of their aggressive marketing strategy."

It may have sharpened Curnin's perception to learn that the two heads of Quadram, now ISC principals, owned 30% of ISC's stock after the merger and could easily veto any of Curnin's decisions.

As conservative as Curnin may have been, the parachute with which he bailed out of ISC was colored gold. He left with a comfortable settlement of $345,000.

Muench is now running ISC as chief executive with three divisional presidents reporting to him. "I still don't like the day-to-day operating decisions," Muench says. "I'm an extreme delegator and, with three divisions, I have the ability to delegate."

Especially in smaller companies, high executive turnover doesn't necessarily mean poor management. After a poor first half, ISC seems likely to report stronger sales and bigger earnings for the year, with a little help from Quadram. Muench, an engineer who saw the need for sophisticated graphics for low-priced computers, is an idea man, not a professional manager. He has relied on a financial whiz to shore up his balance sheets and on a marketing pro to expand the business. Yet Muench has always remained on top as a "delegator." Under the circumstances, his hired guns have looked on their tenures as something less than long-term leases.

Wisely, too.—**Jayne A. Pearl**

While the sun still shines . . .

When we started," says Harvey Anderson, "there were 62 companies listed in the Yellow Pages under 'solar.' We're the only one of those still in business." The Yellow Pages, it should be noted, covered only Contra Costa County, Calif., near San Francisco. But the point is made. California has emerged as the solar capital of the country, and competition among the 1,500 dealers there has been savage. Servamatic is the true toughie. In four years its sales have climbed to about $30 million, close to 10% of the California solar market.

Servamatic has performed splendidly even while OPEC, whose roar sent folks scurrying for roof collectors in the first place, lately has purred like the sweetest pussycat you ever saw. And Servamatic even lacks an edge in technology, except perhaps for its technology in packaging and selling.

People in the solar business call Servamatic's storage collector a bread box. It looks a bit like two giant boxes topped by plastic domes. The insulated boxes house 20 gallons of water each. Reflectors on which the boxes are mounted help sunlight heat the water, which flows into a conventional hot-water heater for household use with little or no additional heating.

Packaging and marketing have sold the system, but Servamatic will soon have to work at that even harder, as federal and state tax credits for energy-saving installations may expire. That could make the prospects for Servamatic and other solar businesses cloudy.

But Anderson understands selling. He sold stereo systems for 5 years and water conditioners for 14, and door-to-door, unsolicited, at that. At Servamatic he screens prospects by phone or mail questionnaire. A positive response wins a householder a visit from one of Servamatic's 220 fervent hustlers. The pitch takes two hours and in 35% of the calls clinches a sale. That's a high score. But Servamatic warrants its system for ten years, offers five-year financing and pays its salesmen commissions only. California's public utilities have helped some, too. Pacific Gas & Electric, for example, recently jacked up rates by 17%. Still, customers end up buying mostly because of income tax credits, which effectively lop $2,200 off the

cost of a $4,000 Servamatic system in California.

Financing its sales offers little risk. Servamatic sells its consumer installment notes to Household Finance or Finance America without recourse (the notes are secured by a lien on the customer's home) and pockets its money five days later. About the same time, it takes delivery of the bread box components from its suppliers and assembles them in an afternoon at the customer's home, eliminating inventory costs. All of which leaves Servamatic's balance sheet practically squeaky clean of debt, while it posted a 7% net margin and about $2 million in earnings for the fiscal year that ended in April.

This has Anderson expanding into multifamily housing and making plans to go into Arizona, New Mexico and Colorado, whose legislators' sunny outlook on solar energy sometimes gives homeowner credits equal to over 70% of the purchase price.

But that figure includes federal tax breaks of 40% that are due to expire in two years. Cash-starved California is scheduled to eliminate what is, in effect, a 15% credit in December. And those tax breaks are vital to the selling job.

Anderson thinks gas prices will have risen enough within two years for his bread boxes to sell without tax credits. Gas prices must go up a lot, in fact, for solar heating systems to create cost savings sufficient to offset vanishing tax subsidies. Anderson meanwhile intends to cover as many roofs as possible with his bread boxes. It's a matter of making hay while the sun shines.—**Ellyn Spragins**

"We changed the contract"

The statistics are scary enough: somewhere in America, a violent crime every 24 seconds, a robbery every 55 seconds and a fire every 10 seconds.

New York-based AFA Protective Systems Inc. takes a provincial view of the crime and fire market. AFA, with just $17 million a year in sales, has stuck close to home. It does business only in the Boston-to-Philadelphia corridor. But there's enough violence and destruction there to provide a nice piece of change for an honest watchman. AFA's sales have doubled since 1977, while the company has averaged a 22% return on equity with little debt. The success of small companies like AFA (formerly Automatic Fire Alarm Co., founded in 1873) has kept growth slow at Pinkerton's Inc., Burns International Security Services Inc. and Wackenhut Corp., the industry leaders (FORBES, *Apr. 12, 1982*).

But the recession and competition have caught up with AFA. New orders are flat. Still, AFA expects to see an increase in sales and earnings this year. To turn the trick, says Chairman Philip Kleinman, "we changed the contract."

He means AFA's standard customer contract, which started to change in the late 1970s. "We have a unique business," Kleinman says. "There is an insatiable demand for our service, yet prices were not keeping up with cost because of the competition. So the first thing we did was not take new business just for the sake of adding business. We decided we would only do it at our price." There is enough demand to allow AFA's higher prices.

The standard industry contract had a term of five years. Kleinman kept

AFA Chairman Philip Kleinman
"There is an insatiable demand for our service."

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Why the Mercedes-Benz 300D outperforms every other turbodiesel the automobile world has devised.

Pistons cooled by oil...a lightning-quick automatic shift...demon roadholding *and* a supple ride. At $31,000,* the 300D is one technical feat after another–a turbodiesel apart. Moral: Mercedes-Benz automobiles really are engineered like no other car in the world.

The Mercedes-Benz research car is a sleek silver blur as it laps the test circuit at 195 miles an hour–hour after hour after hour.

Propelling it is an engine like none before: a three-liter, five-cylinder turbodiesel engine, the blades of its turbocharger's compressor wheel whirling at 1500 revolutions *per second*, the crowns of its pistons rhythmically bathed in synchronized bursts of oil. It is the most amazing diesel engine on wheels.

And it is virtually identical in design to the engine that powers the Mercedes-Benz 300D Turbodiesel Sedan.

Unsurprisingly, perhaps, there is no more powerful automotive diesel *or* turbodiesel engine offered today. At last, the kind of power and performance that has been exhilarating drivers since the dawn of the automotive age–engineered into a diesel.

The thinking man's kind of performance

Meanwhile, the 300D's bravura performance is unlikely to exact typical performance-car running costs. As a diesel, it could push your fuel costs per 5,000 miles well under $200, based on average current $1.20 per gallon diesel fuel prices and a 33 mpg highway mileage figure. (City mpg 27 EPA.)**

And as a Mercedes-Benz, it shares a name so coveted by American buyers that after the first three years, the 300D has been shown to retain *85 percent* of its original value.

At $31,000, the 300D is more than a performance sedan. It is the thinking man's performance sedan.

Hurtling through the labyrinth

Exhilarating as it may be, the 300D's performance is primarily meant to help you cope with modern driving life.

Example: Behind the factory walls, a Mercedes-Benz test driver hurtles a 300D at frightful speed through a labyrinth of zigzag pylon curves. Frolic is not on his mind. He is demonstrating that the suspension system of the 3,585-lb. sedan is tight and firm enough to handle the sudden, heart-in-the-mouth evasive moves that every driver sooner or later confronts.

It is for this same reason that the power-assisted steering system exhibits a near obsession with exactitude. It is quick, clean, crisp; no power-steering sluggishness.

Brakes are not discs in front and drums at the rear but discs, discs, discs, discs.

The 300D's automatic transmission is a four-speed, torque converter unit capable of making shifts a millisecond faster and more efficiently than the canniest human hand. But it is so nicely placed–down by your right side, a flick of the wrist away–and so precise in action, that you may find manual shifting irresistible.

Well-groomed ride

You will not find yourself gritting your teeth over every bump in the road. A beautifully controlled and supple ride is one benefit of the 300D's fully independent suspension system, augmented by ultrasensitive dual-chambered oil/gas shock absorbers, and with front and rear anti-sway bars integrated into its design.

The 300D's cabin affords almost *100 cubic feet* of interior volume within a wheelbase of well under 10 feet. Five adults can enter unafraid of cramps or claustrophobia.

One of its more elaborately engineered elements is the seats. The driver's seat, for example, is a 58-lb. biomechanical support system, built on a foundation of steel coil springs under a sandwich of five padded layers.

You may not opt to buy a single extra-cost option, for the best of reasons: you may not need to. From automatic climate control to electronic cruise control, from a central vacuum locking system to a four-speaker cabin stereo system, from electric window lifts and heated rear window and almost ad infinitum–useful conveniences are everywhere. And everywhere standard.

Mercedes-Benz was patenting major safety ideas in 1951. The 300D reflects this uncommon concern, and the decades of safety research and development it has spurred. It incorporates 120 safety features as standard equipment.

*Suggested retail price p.o.e. New York. West Coast prices slightly higher.

**EPA estimate for comparison purposes. The mileage you get may vary with trip length, speed and weather.

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Engineered like no other car in the world

selling long-term contracts, but added a clause allowing AFA to raise prices anytime after the first year. Of course, the customer always got an option to cancel. "For example, instead of getting a 15% increase after three years, we could get 12% the first year, 10% the second and 9% the third," Kleinman says. Instead of ending up with a $180 increase on the standard $1,200 annual contract, AFA received $411.

So far, Kleinman has met little opposition to his plan. "Most of our customers are landlords," he says. "They have escalation clauses for rent. Our increases are factored in." And AFA owns the security devices installed on a customer's property. If a customer cancels, he must install a new system. The cost, Kleinman says, usually would exceed the cost of sticking with AFA.

At present, Kleinman's effort is working fine. Still, he observes, "how long our customers will allow us to do this is another matter."

Snug as a bug in a rug?

You might have predicted disaster for ChemLawn as the recession began. Despite the company's achievement in tripling its sales, over five years, to $142 million in 1981, who could be sure that, in hard times, homeowners would keep paying $150 a year to have somebody like ChemLawn care for the yard? Suburbanites could decide to do the work for themselves, and the Columbus company might head for the compost heap.

Nothing of the sort happened. For fiscal 1982, ended Oct. 31, ChemLawn's revenues rose 30%, and profits increased 28% to $10 million. In fiscal 1983 sales should exceed $200 million. And the price on ChemLawn stock has increased to $47, about 30 times last year's earnings.

ChemLawn weathered the recession with increased advertising, crash courses to improve employee marketing, and profit-sharing to bolster morale. Having emerged from the slump in great shape—ChemLawn now has an estimated 40% of the residential lawn care market—the company is branching into big-ticket commercial sales and new services. Six years ago it made its first move, a logical extension into tree and shrub care (FORBES, *Sept. 17, 1979*). Now it's headed into pest control and carpet cleaning, too. It would like to become a corporate houseboy and exterminator as well as the groundskeeper and gardener.

A ChemLawner feeds the grass
Looking to expand the turf.

Yeah. It does seem a little weird. But have you tried to hire household help lately? ChemLawn's new chores fit its corporate "mission," which really involves service more than horticulture. Specifically, ChemLawn has looked for services that are neither overly complicated nor labor-intensive but demanding of a certain bedrock expertise. In lawn care, for instance, ChemLawn neither mows nor seeds. But it does a first-class job of fertilizing the fescue and herbiciding the henbane.

William Copeland, vice president-finance, thinks the two new businesses will fit in well. ChemLawn will charge householders around $70 to clean several rooms of wall-to-wall carpeting. Of course, the ChemLawn customer could rent equipment to clean his own carpets, but then he could fertilize his own lawn, too. He doesn't. He hires ChemLawn.

Controlling bugs and sanitizing carpets are services that, like lawn care, require repetition, so future business seems assured. The services also rely on the salesmanship of the servicers, an important element in ChemLawn's success. "We don't have some people making all the promises and a bunch of others trying to live up to them," says Copeland. If, then, the markets are new, the success formula is proven: You make a promise and you keep it.

Yet, in pest control, ChemLawn faces established competition not only from local exterminators but also from a few national outfits such as Orkin and Terminix. ChemLawn's big weapon is its marketing expertise and its existing list of 1.2 million satisfied residential and commercial lawn care customers; 80% of them renew the service.

ChemLawn will finance the new business lines with retained earnings. The new ventures will share existing office space.

Management, which recently convinced stockholders to approve stiff antitakeover provisions, certainly has no intentions of selling out. "If you saw the company growing like it is," says Copeland, "what would be the advantage of joining up with someone else?"—**Laura Saunders**

If costs are dropping faster than prices, obviously you are making money. That's why there are good deals around in oil.

The case for drilling partnerships

By Jean A. Briggs

WANT TO BUY a partnership in an oil drilling fund? Before you say no, consider this: Drilling funds may be better deals today than in 1980-81, when they were hot. They may be very good deals.

True, the price of oil is down from $34 per barrel to $29, but the cost of finding a barrel is down, too. In 1981 it cost about $14 to find a barrel of oil. Today it costs about $9, a 35% drop.

An industry shakeout has improved investors' chances. Careful investors have always shunned financially weak companies, but now there are fewer of these. Nearly a dozen companies are no longer in the business of selling oil partnerships, and in the last six months three have filed for bankruptcy. You still need to check out your general partner very thoroughly, but he is more likely than previously to be financially sound.

Furthermore, when his drillers go out to work, they will drill his best prospects. Since the amount of money coming into the business is a flow, not a flood, they can't drill every prospect in hand. Then, too, the people out there doing the drilling are all professionals. "The high school kids who were getting $11 an hour to operate the machinery are now back in high school," says Lawrence Winston, chief executive of Quinoco Resources and former head of E.F. Hutton's tax shelter department.

Another point: Information available to investors is better now than it used to be. You don't have to rely solely on your broker or on unfathomable SEC-required prospectuses. For a few hundred deductible dollars you can buy a service such as *Investment Briefs* (published by Investment Search in Annapolis, Md.), in which former oilman Arthur Jerrold King and his staff analyze, compare and rate programs.

What about the price of oil? What will it be three years from now when any successful wells your partnership drills are ready to produce?

The honest answer is: Nobody knows. They did not know in peak year 1981, either, when projections showed oil prices escalating continuously. But unless prices relentlessly continue to fall, investors aren't likely to suffer. If they go up—not beyond the realm of possibility—investors will gain that much more.

True, you don't need shelter as much as you once did. The maximum tax rate is now 50%, not 70%, but if your recent experience with your 1040 has made you long to pay fewer tax dollars, you might consider an oil deal. The economics are probably better than ever. ■

Income programs are hot: caution

When investors began to lose interest in oil and gas drilling funds, resourceful brokers started selling oil and gas income funds. In 1982 the number of dollars raised increased from $810 million to $1.3 billion, and so far in 1983 the number of outfits in the business has increased from 14 to 34.

Who's buying income funds and why? Quinoco's Larry Winston explains that, from the seller's point of view, the idea was to use the limited partnership form but to come up with something appropriate for people who are not yet in the 50% bracket. "In 1980 only 4 million of the 80 million taxpayers were in the 50% bracket; 26 million were in the 25% bracket," he says. So Hutton and others began emulating Petro Lewis, the granddaddy of them all when it comes to selling income funds.

Income funds aren't tax shelters per se: You don't get to write off your initial investment, though you do shelter your future cash flow with depletion allowance and depreciation benefits. "They're for people who aren't rich but want to accumulate wealth and who aren't in the highest tax brackets," says Winston.

Jerry King points out that the growth of the business has been good for the hard-pressed drilling industry. It means that cash-short drillers can sell developed properties to income funds and either pay off their debts or go out and drill again.

For investors, however, there are some caveats. King's concern is that, with so much money chasing after properties, a shortage of good properties might well develop. Then, of course, the price that a fund pays to buy a property would go up. Unless end-product prices went up commensurately, the yield to investors would fall.

Winston has another concern: leverage. Some funds, projecting that oil and gas prices would escalate and interest rates would fall, borrowed heavily, he explains. Since oil prices have come down, they are now facing a financial squeeze.

Winston won't name names or talk about Petro-Lewis' recently reported financial problems, but he gives a hypothetical example. Suppose such a fund raised $1 million, borrowed $1 million and spent the money on two oilfields. Then oil prices dropped by one-quarter and the company's bank said that it wanted more collateral. The fields that had been worth $1 million each were now worth $750,000 or less. If the company was forced to meet the collateral call, it might have to sell as much as half the property. The yield available to investors then would be far less than they had anticipated.

In short: Downside risk exists.—**J.A.B.**

When the widows and orphans get in

The market's getting frothy, no question. The Stein Roe family of mutual funds (assets under management: $2 billion) has opened a street-level office in its native Chicago, and on some days the line of prospective buyers has stretched into the hallway. Reminds us what money manager John Hartwell once told us about how things were in the late 1960s when a lot of people thought the stock market would go on rising forever: "We used to have people lined up in the corridors at 9 in the morning waiting to buy shares in the fund," Hartwell recalled. Another sign of a market that is getting overheated: John Hartwell, who went from fame to obscurity as a money manager when the old bull market petered out, is hot again. A mass magazine recently mentioned the Hartwell Leverage Fund—whose net asset value has almost doubled over the past year—as a smart buy. Might be time to remember those old Ogden Nash lines:

And he whispered about,
That it's time to get out,
When the widows and orphans get in.

—**William Baldwin**

This one is different

"There is an enormous amount of gambling going on in the land." That's Roy Neuberger's judgment on the current stock market. He thinks a lot of the money going into securities is money that should be going into capital spending, and that's not a good thing. One of the grand old men of Wall Street, the senior partner of Neuberger & Berman is still active in his firm on the eve of his 80th birthday, and his judgment counts for a great deal on The Street. "It's the most complicated market I've seen," Neuberger says. "There have been rallies before with greater percentage gains, but what makes this one different is that there haven't been any real breaks in the composite averages." He goes on to explain that most bull markets are characterized by a strong, but not steep, uptrend punctuated by sharp reactions on the downside: "You're not getting that now. Instead there are sharp upswings." Which to his eye is not the way a bull market is supposed to behave. "It's a no-man's-land," he adds.

"If you're looking for a correction," he says, "I suspect the market will be

Roy Neuberger
A most complicated market.

punctuated by a sharp break sometime in 1983. But most of the time the breaks will come in individual stocks." How long will the bull market last? "A long time, if the government would spend less on armaments and more on technology and medical research," was the grand old man's reply.—**Thomas Jaffe**

Friend of the friendless

If he's never remembered for anything else, Robert Hanisee will go down in the annals of Wall Street as the man who was bullish on Teledyne during the years when the stock was friendless and selling for a few dollars a share. "I like to go against the grain," Hanisee says. Now with the Los Angeles firm of Seidler Amdec Securities, Hanisee currently has another relatively friendless stock he thinks is way undervalued: Whittaker Corp. Whittaker has been having a poor year and will net only about $2.60 a share, way down from last year's $3.77. Consequently its stock, even after the big rally, is still 20 points below its 1981 high of 50. Beyond the decline, though, Hanisee sees great things.

Whittaker manages Saudi Arabia's health care system. This winter that contract got a $1.4 billion, three-year extension. The Saudi business is so lucrative that, even with the rest of the company struggling, Whittaker was still able to end its October year with about $100 million in excess cash—nearly $7 a share. Over the last few months Whittaker has drawn on this cash to acquire 8.3% of Smith International, in oilfield services, plus stakes of less than 5% in two other unnamed companies. It also bought 10 million barrels of oil in the ground in Kentucky for $2.60 apiece. Meanwhile, all the moneylosers in its general medical group are being sold off, and it should return to the black by next year. Hanisee's conclusion: "With limited help from the economy, Whittaker ought to earn close to $5 a share in fiscal 1984. At a recent price of 30, then, that makes the stock's multiple a cheap 6 times next year's profits."—**T.J.**

Doesn't quality count?

Colgate's first-quarter earnings were out early this month, and they were up a measly 5% from last year's first quarter. This compares with a 15% gain for rival Procter & Gamble. Yet the current rally has treated Colgate as well as it has P&G. Both stocks are up around 50% since the big rally started last August. Both stocks sport a P/E of about 9 or 10 times next year's estimated earnings. James Dougherty, who follows household products for New York's F. Eberstadt & Co., thinks it absurd that the market ignores the tremendous differences in quality between P&G and Colgate. "Why buy the third man on the totem pole?" Dougherty asks, citing both P&G and Clorox as better companies. Why indeed?—**T.J.**

Fast, fast relief

In a bull market like this, the boys really go out and beat the bushes for things to buy. This year they have uncovered Glaxo Holdings Ltd., the British pharmaceutical. A year ago its American Depository Receipts were at 4. They were recently at 14. How's that for a fast, fast profit? Up over 300%. Trading volume has been terrific: as many as 9 million shares a week in mid-April. What's up? Well, Glaxo has a great-sounding new ulcer drug that is taking on SmithKline's gold mine, Tagamet. The stock's no screaming bargain: about 25 times earnings expected for the fiscal year ending this June and a total market capitalization of almost $5 billion. But Glaxo boosters expect an earnings gain for 1984 that would bring the P/E down to just 17 times earnings, and they see gains of 25% or more through 1986, which would bring the P/E way down. Says David MacCallum of Paine Webber: "This one's growing 2 to 3 times as fast as the U.S. pharmaceutical biggies."—**T.J.**

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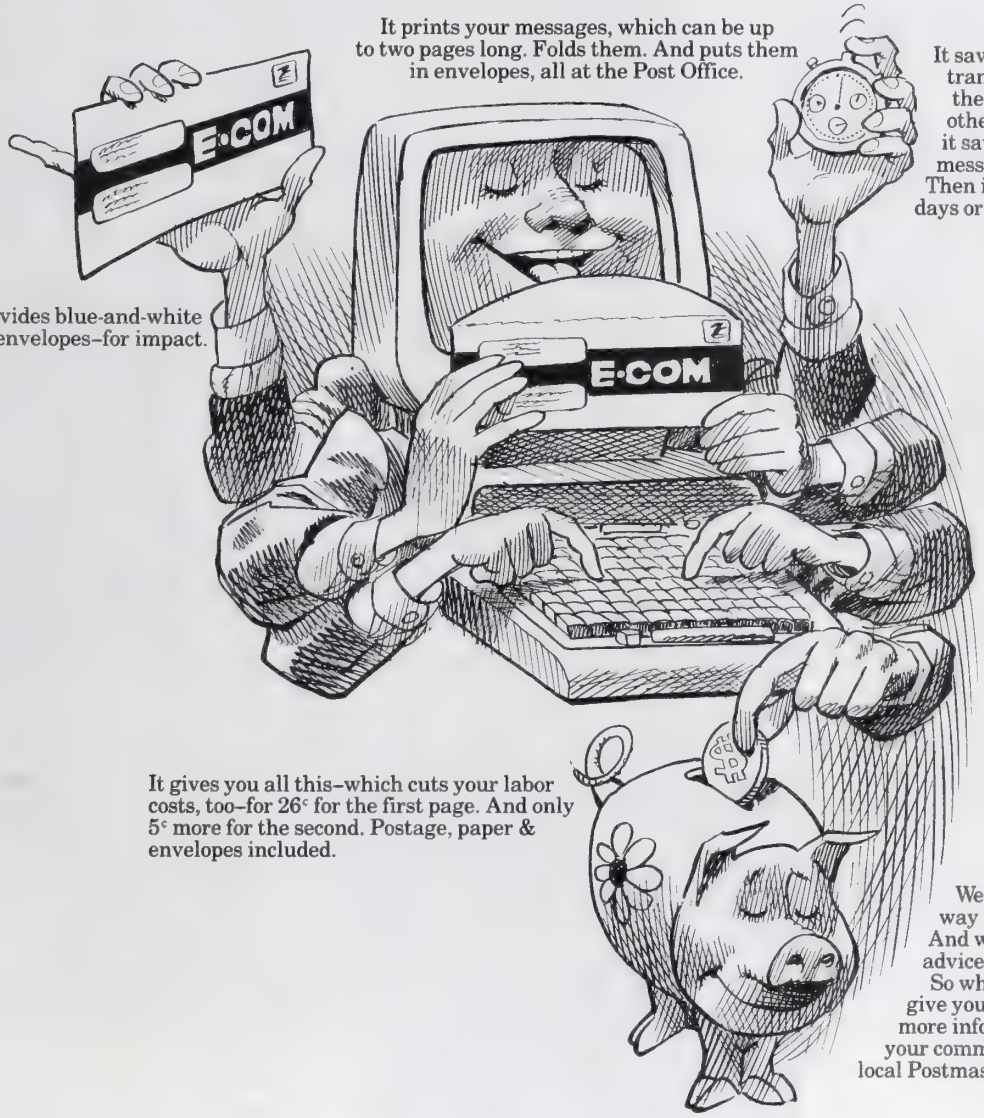

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Cluett, Peabody's reorganization has been slow, steady and finally . . . successful.

Straight as an arrow

By Barbara Rudolph

STYLES CHANGE, colors come and go and fabrics improve, but one out of every six men's dress shirts sold remains an Arrow. This 131-year-old brand accounts for 25% of Cluett, Peabody's $875 million in annual sales and 50% of profits. But such success creates problems. Over the years Cluett has attempted a series of diversifications, which often rumpled the corporate balance sheet.

These days, however, Chairman Henry Henley Jr., whose southern drawl is as deliberate as his management style, is impressively ironing out the wrinkles. Henley is closing Cluett's once-vast network of retail stores and has cut back the women's apparel business. The result: Return on equity is up to a respectable 12%. Earnings hit a record $24 million last year, a slight increase over 1981 and a good showing in tough times.

The change didn't come easily. Henley, who came to Cluett in 1967 from McKesson Robbins, has been steadily reorganizing for the past seven years. He disposed of a dozen divisions and made a handful of small acquisitions, but the real transformation began in 1976 when Cluett sold the last remaining pieces of Van Raalte. The division's basic product was women's lingerie and hosiery. Cluett, primarily a menswear company, had no experience in that market.

But such diversification was fashionable. After all, wasn't Palm Beach, another old-line menswear manufacturer, virtually minting money with its Evan-Picone line of women's suits?

For Cluett, however, Van Raalte brought nothing but snags. Women started wearing pantsuits, and Van Raalte's lingerie languished on the shelves. "It was a turnaround we didn't turn around," explains Henley.

Indeed, the experience with Van Raalte may have left Henley wary of the exotic. Cluett's best recent moves have been in acquiring small, old-fashioned clothing companies. Consider Duofold, a $33 million-a-year manufacturer of dual-layer underwear, which Henley picked up in 1979. Hardly glamorous, but return on investment exceeds 12%. That's doubly impressive compared with Cluett's corporate ROI of 8%. Lately, in addition, Cluett has moved the Duofold line beyond sporting goods outlets into major department stores. And you don't need to be Perry Ellis to imagine a sensible product extension: From winter underwear Duofold has branched out into rugged sportswear.

Wall Streeters, of course, still expect a bit of fashion flair in apparel companies. "Cluett is missing the icing, one really upscale product," says one financial analyst. Henley agrees—but only up to a point. Cluett now manufactures and markets Alexander Julian and Ron Chereskin sportswear. Both are hot today, though it remains to be seen whether Cluett can make money as well as fashion waves over the long term.

Instead, selling all those shirts—something like 50 million last year—keeps Henley worrying about the more mundane parts of the apparel business. "Cluett has always been a leader in production," says a consultant at Kurt Salmon Associates.

That's why Cluett has been able to continue domestic manufacturing of virtually all dress shirts, two-thirds of Arrow's total line. Indeed, Henley is considering moving the production of some Arrow sports shirts from Asia to the U.S. A dramatic move, yes, but nothing radical. The change is just a reward for Henley's persistent attention to his oldest, most profitable and anything-but-glamorous major product. ■

Cluett, Peabody's Henry Henley Jr.
It took seven years to iron out the wrinkles.

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Utility rates traditionally were set by counting votes, not economic costs. But now the rate tables are turning.

Power politics

By William Baldwin

THE ENERGY PRICE WAR has brought a change of emphasis in utility rates. Industrial users are getting quantity discounts and, what is more, hitherto-consumerist utility regulators are approving the deals.

At least a dozen natural gas utilities have filed for rate cuts for big industrial customers, and Canada is expected to help out soon by dumping excess gas on the market at a 25% discount from the official border price.

The Bonneville Power Administration is offering aluminum smelters in the Northwest a 54% discount on electricity.

Flaring of gas in Mexico
If Canada discounts, will Mexico follow?

Consolidated Edison has been given approval for electricity discounts averaging about 20%—available to new or expanding factories—in parts of New York City where its transmission lines are underused.

The California Public Utilities Commission approved a price break in March on natural gas sold to Southern California Edison and other electric utilities so the gas can displace fuel oil. Households don't qualify. Quite a turnabout from the 1970s, when California and many other states mandated outright subsidies to residential electric customers in the form of low "lifeline" rates.

In every one of these cases, the price cuts are unrelated to the reduced costs of servicing large accounts. Those are already built into rate tables. Instead, the discounts are a pure reflection of the bargaining power of certain customers. When they shut down factories or switch to alternative fuels, they leave behind a distribution system whose fixed costs have to be borne by the remaining users—the small commercial and residential accounts. Hence, price discrimination in favor of big buyers.

" 'Discrimination' has a bad connotation," says Massachusetts Institute of Technology economist Henry Jacoby. "But if you forbid it, the household customer loses." By permitting it, the regulators can often make everyone, except for the fuel oil distributor, better off.

Consider Canadian gas, of which there is a huge supply (30 years' worth), but which is coming into the U.S. in only half the quantity pipelines can handle. That is because the export price, recently cut to $4.40 per thousand cubic feet, is still too high. The Canadians aren't about to reduce that rate further across the board, but they probably will offer a discount that would benefit potential customers like Seattle Steam Corp., a company that sells heat to downtown buildings.

Here's how it would work, as tentatively proposed to the four tiers of regulatory agencies involved: Northwest Energy, the interstate pipeline that buys imported gas from British Columbia, would pay a lower amount, probably $3.30, for gas taken above 1982 levels. Northwest's customers, mostly distribution companies like Washington Natural Gas, would in turn get a discount on incremental volumes. Washington Natural would then offer a handful of customers an "incentive" price of perhaps $3.90, vs. the current $5. One of those

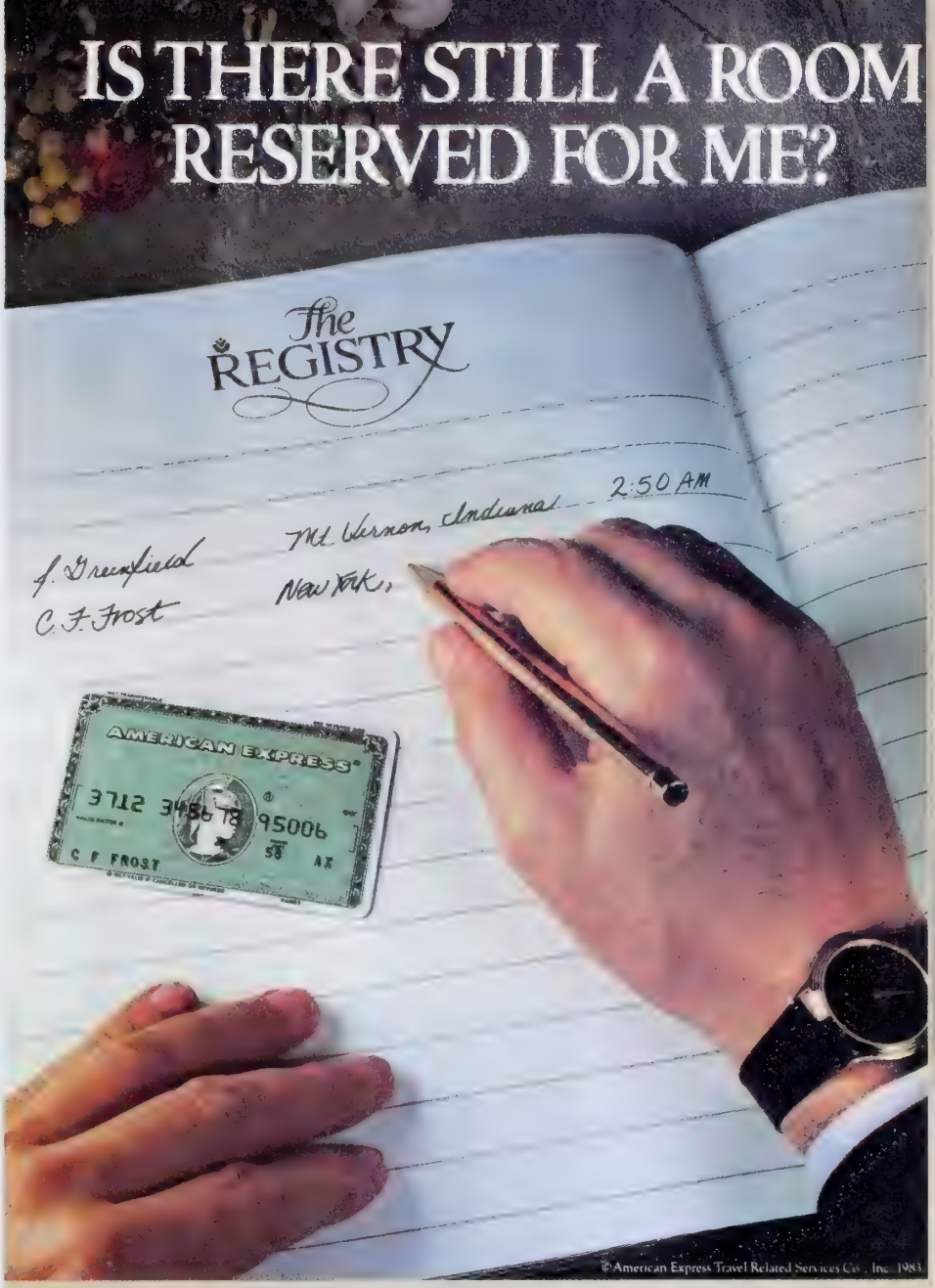
lucky buyers would be Seattle Steam, which is presently spending $7 million a year on fuel oil.

Various Canadian tax collectors would capture most of the $3.30. Producers in British Columbia, whose biggest costs are sunk in the ground, would net an extra 60 cents or so. Seattle Steam would see its fuel bills drop maybe 10%. And there would still be 60 cents left over for Northwest Energy and Washington Natural to split—revenue that would help keep down rates for other customers.

Not only Canadian producers have large sunk costs and energy to burn. Mexico last year flared an average 638 million cubic feet a day of gas, for want of the capital it would take to process and consume it. The figure will likely be higher this year: On Apr. 1, Tenneco and other importers of Mexican gas turned down the spigot from 300 million cubic feet a day to 180 million. To market that 120 million of daily surplus, says a Tenneco executive, Mexico would probably have to slash its price to $2.75 per thousand cubic feet. Feeding into the southern U.S., Mexico would be competing with $3 U.S. gas. But, for now, an incentive price concession even more generous than Canada's $3.30 appears politically impossible. An energy adviser to President Miguel de la Madrid says the policy will be to wait for a recovery of gas prices in the fall. That recovery, however, might not occur if incentive pricing leads to dumping of fuel oil, gas and even electricity at distress prices.

The Bonneville Power Administration has been dumping up to $1 million a day worth of hydropower over its dams for want of a market for the electricity. It hopes to cut the waste slightly this summer by giving aluminum producers discounts worth 10 cents per pound of ingot. Since the discount will be available only on aluminum production above current levels, Bonneville figures it will increase its revenues. Also, some of the 2,700 laid-off aluminum workers in the Northwest will go back to work.

The only thing that makes schemes like this unpopular is that they are in some sense unfair. "Why shouldn't the residential user get a discount on gas?" demands Edwin Rothschild, assistant director of the Citizen/Labor Energy Coalition. "Just because he doesn't have dual-fuel capability? Just because he's locked in?" Frankly, yes. Let's be clear about it: It was politics that accounted for all those years of favoritism for householders. Now economic reality has returned, and it's industry's turn. ■



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The computer boom is creating countless business and employment opportunities. Here are just a few of them.

Programming a personal future

By Ellen Benoit

FORBES has chronicled at considerable length the U.S.' continuing transformation from an old-fashioned industrial society into one based on knowledge and services. And if some people remain skeptical about the new society's ability to provide enough jobs, it is largely because the statistics aren't all that good. How you color a worker's collar depends on the U.S. Department of Labor's *Dictionary of Occupational Titles,* and its definitions are palpably behind the times. The dictionary was upgraded significantly between the publication of the third edition in 1965 and the fourth in 1977—2,100 titles were added, while 3,500 classifications were dropped, leaving about 20,000 job titles. Nevertheless, many important new professions have been ignored. As a consequence, major changes in the structural composition of American labor have been overlooked.

Nowhere is this more apparent than in the computer industry. The Bureau of Labor Statistics says that the computer industry accounted for 5% of all new jobs generated between 1972 and 1982. That's an understatement. It happens because the dictionary lists only eight categories of computer-related professions. If, however, you count all of the ancillary professions that have grown up to serve the computer industry, we suspect that the percentage of job growth is far greater.

Dynasty founder Larry Hagerty
Just doing a little handholding.

If and when a new dictionary is published—its fate is up in the air because of budget cuts in the Department of Labor—FORBES recommends the following additions.

Home computer sales

It sounds like something inside a matchbook cover on making easy money in your spare time. Working for Dallas-based Dynasty Computer Corp. means selling computers door-to-door or at parties.

Dynasty's founder, Larry Hagerty, is an engineer-turned-lawyer who ended up selling cosmetics and jewelry. He also ran a sales training company but wanted to get into the computer business, so he combined his interests and founded Dynasty, a company that emphasizes the "personal" in personal computers. Hagerty, 40, already has 3,000 salespeople selling his machines, and he bases his expectation of success on the fact that many customers are first-time users who are more than a little intimidated by the prospect of owning a computer. "We're just doing a little handholding," Hagerty says.

Dynasty's computer sellers are somewhat analogous to the Avon ladies, and Hagerty is working hard to emulate Avon's methods. "Dynasty will install your system for you and show you how to use it, all in the comfort of your living room," he says.

But unlike the Avon lady, the typical Dynasty salesperson is a 48-year-old male who earns $40,000 a year in another job and $200 to $300 a month on commission with Dynasty. He sells the smart-ALEC II, a complete 8-bit microcomputer system, for $2,995, and the smart-ALEC Jr., a "starter" computer, which goes for $130.

Dynasty is not to be taken lightly. Hagerty, who flies hot air balloons in his spare time "to get away from high technology," started the company in 1980. During his first year Dynasty did over $1 million in business, and

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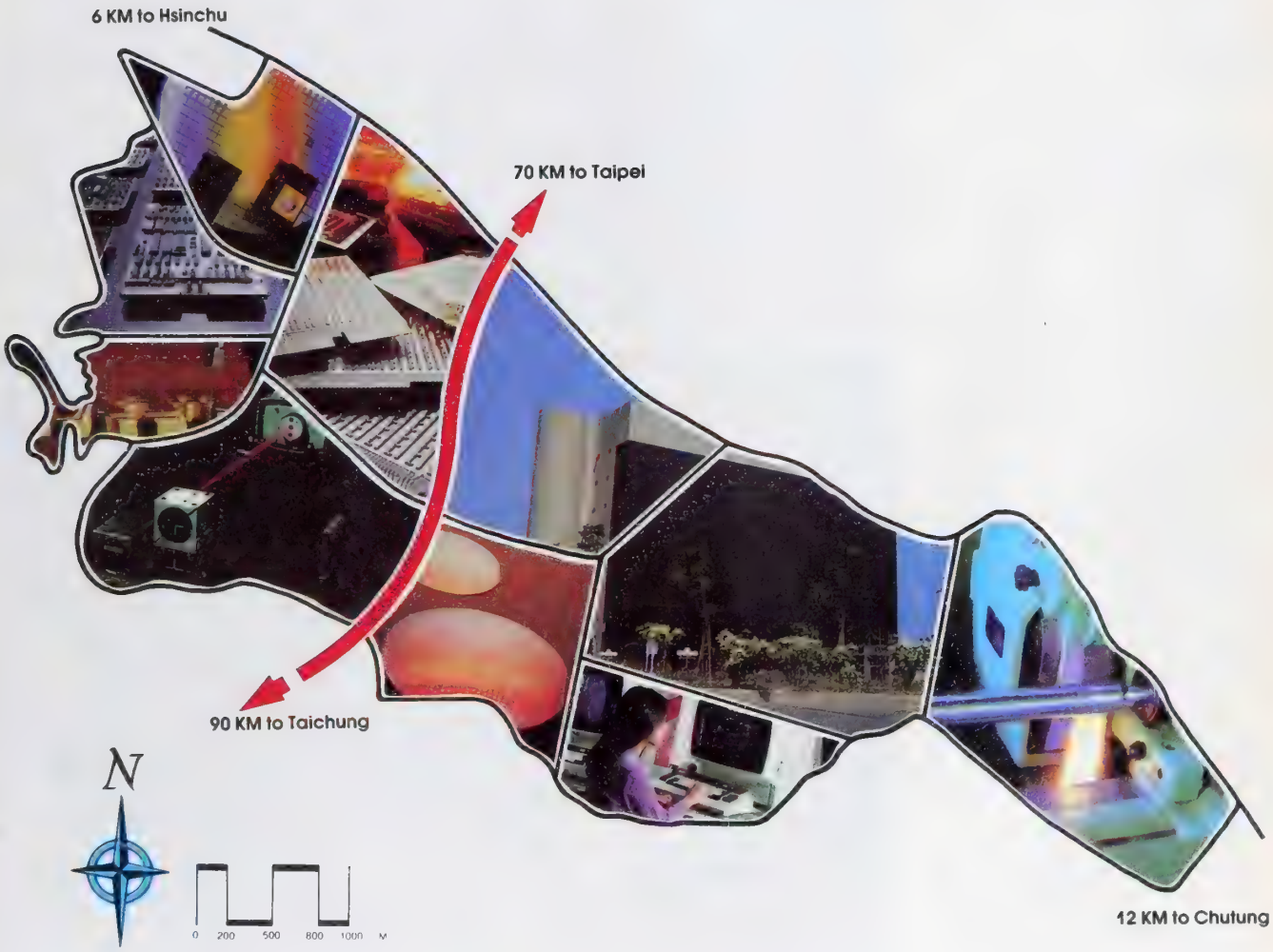

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Technology

he is expanding rapidly enough to require a sales force of 5,000 in 17 states by year's end. He's also helping some of its independent salesmen set up a chain of product-independent computer learning centers where people can be trained in the basics of using computers and in various applications. Projections call for 50 centers to be open by the end of the year.

Hagerty believes Dynasty could eventually be serious competition for retail computer outlets. "If they begin adding training rooms and handholding [which some already do], we won't be as much of a threat," he admits. "But we're definitely a threat to the mass merchandisers," who are known for a lack of postsale support.

Computer rental

The only way to get a personal computer used to be to buy one . But now you can try before you buy, by renting one from Garry Buttner. He is a marketing manager of General Electric's Instrumentation and Computer Service department in Schenectady, N.Y., and his newest business is renting IBM, Apple or Hewlett-Packard personal computers on flexible terms for a week or for several months. Monthly rates start at $215—or maybe a little less, depending on current market prices.

GE will rent the computers out of its 66 nationwide locations, with service through a depot repair plan. Buttner, 35, considers the rental system ideal for business customers who need computers for short periods of time, and for those who want to test the idea of owning one before buying.

Why is GE getting into small computer rental at a time when no one else wants to? Most vendors are afraid of being left holding an inventory of obsolete equipment after the term of a rental or lease has expired; but GE assumes many renters will later buy and is relying on a healthy secondary market of people who will jump at the chance to buy used, obsolete equipment at a good price.

"We currently own a couple of hundred machines," Buttner says, "but by the end of December we expect to have a few thousand in inventory."

Computer psychologist

Some call her work "tech psych," but social psychologist Shoshana Zuboff of the Harvard Business School prefers to label her research "the study of computer-mediated work." Whatever the title, it's a whole new field of psychology that deals with the not always smooth relationship between man and computer in the workplace.

Zuboff has interviewed nearly 400 workers whose jobs have been affected by computers, and is struck by their almost uniform uneasiness. She cautions management to "listen to the resistance" of people forced to deal with technology. "There are lots of things in this conversion that motivate people toward resentment," says Zuboff, 31. "They may be afraid it demands skills they don't have. Their relationships with co-workers are being altered, and they are uncomfortable. Then there's the abstraction, the intangibility of computers that leaves people feeling frustrated."

The primary barriers to implementing new technology today, according to Zuboff, are human ones, at both the managerial and subordinate levels. In particular, Zuboff expects to see a different distribution of occupations within organizations. She predicts a gradual change in management structures from the traditional pyramid to a diamond, as distinctions between work done in the middle level of an organization and at the bottom begin to blur.

Computer camp counselor

When Denison Bollay was 13 years old, he fell in love with computers. He even started a computer club that actually did a couple of contract jobs for corporations looking for projections. In 1980 Bollay, who is now 30, decided to spread the joy of computing to kids from 7 to 15 and founded The Original Computer Camp Inc.

"Kids take to things quickly," says Bollay, "and in a camp environment, especially quickly. Mixing the computer with recreation lets kids think of it as a friend." A typical day at computer camp includes about three hours of computer training, with the rest of the time earmarked for regular

Harvard social psychologist Shoshana Zuboff
Exploring the relationship between man and computer.

camp activities such as swimming and hiking. Every evening, kids are allowed a couple of hours of free time on the computer.

Two weeks of computer camp costs parents $895, and a lot of them are sending their kids. Bollay grossed $750,000 last year and projects close to $2 million for this year. About 2,000 campers are expected to participate during the coming summer season, which runs from mid-June to late August. Based in Santa Barbara, Calif., The Original Computer Camp has six campsites in various parts of the country (one in England) and employs about 150 college students as camp counselors.

Bollay says he's basing his whole curriculum this year on artificial intelligence and decries the current notion of computer literacy that revolves around the keyboard, claiming the keyboard won't be around in seven years. At Bollay's camp, kids teach robots how to run through mazes, in order to understand how machines "think."

Denison Bollay (right), *founder of The Original Computer Camp*
Swimming, hiking and a few hours on the computer.

Computer sales trainer

"Ninety percent of microcomputer salespeople have limited-to-nil prior computer sales experience," declares Vince Caracio, 47, president of Sales Techniques, Inc. in Dallas. Those who do have experience, he finds, generally come from office equipment or large computer sales. And that doesn't cut it, because the whole selling game is different with microcomputers. The sales cycle is shorter, and vendors typically sell most microcomputers to first-time users. That requires the kind of handholding for which, Caracio says, conventional salesmen haven't been effectively trained.

He may be right. Since starting Sales Techniques five years ago, Caracio and his nine staff members have trained about 4,000 people, and they claim to have no major competition. "What other companies consider sales training," says Caracio, "covers little more than how to turn the computer on. We seem to have been able to bridge the gap between sales and applications."

Prospects for continued success would seem unlimited, judging by the numbers. Caracio cites a study that indicates a shortage of microcomputer salespeople of close to 46,000. "With every computer retail store short two or three people," he says, "and distributors with even bigger needs, that demand seems pretty realistic." It has certainly paid off for Caracio: Annual sales for the privately held firm are already more than $1 million, and Caracio predicts he'll have a $2.5 million company by the end of 1984. Without serious competitors, the market would appear to be open.

His own plans for expansion? Since it's just as hard to find qualified people to teach as to sell, Sales Techniques is going to put its training on videotape to use in tandem with microcomputers. By August, Caracio plans to have instructional software available for the IBM and Apple personal computers.

Computer fair organizer

Some 350 computer trade shows are now held annually in the U.S., but Jim Warren says, "It's more of an anarchy than an industry." Warren should know; he is both a pioneer and a veteran of big computer shows. Warren is chairman of the West Coast Computer Faire, which started six years ago in San Francisco with about 175 exhibitors and 13,000 attendees. His latest Faire, in March, drew more than 47,000 people, each paying $15 to see the wares of 450 companies.

Despite his success, the bearded, heavyset Warren, 46, didn't start out to be a technologist's P.T. Barnum. He taught math for a decade before "stumbling into computers" as a programmer in the late Sixties. The Computer Faire was organized to compete with shows starting on the East Coast. "We were sitting here in Silicon Valley," he says, "the undisputed center of the industry, and we said, 'why are all those people getting together out there when we're the center of things?'" Warren's Computer Faire is now one of the biggest end user shows—the kind devoted to "tire kickers" and first-time buyers.

Although Warren finds the Computer Faire profitable, he is disillusioned and wants out—passionately. "I'm blatantly trying to sell the show," he says. "It makes a huge amount of money, but money isn't enough. It's a shuck industry."

What will Jim Warren do next? Go back to what he was doing before. "I was trained to be an educator and a computer professional, and that's what I want to do." And probably create yet another new profession.

Software talent agents

Just like other businesses, the computer industry now has its own "ten percenters." The Software Agency in New York is a consortium of lawyers and literary agents who represent software writers, directed by 35-year-old Jay Acton.

Acton and about a half-dozen other agents in New York and Boston are starting out with about an equal number of software authors, but he predicts the volume generated by his software writers will equal that of the 100 literary authors in his stable within two years. Since industry experts say about 75% of the application software programs sold are produced by independent software writers, Acton's count may be conservative.

A Breakthrough In Labor Relations Has Vehicles Made

Newsweek called it, "... a revolutionary agreement...." The Washington Post observed, "... a profoundly hopeful sign for both the automobile industry and its employees... a good sign for the American economy as well." The Detroit Free Press said, "... a whole new style and approach to Ford's dealing with employees...."

These and lots of other respected publications were referring to an historic labor agreement, two years in the making, that was signed on March 1, 1982, by Ford Motor Company and the United Auto Workers. It was an enlightened commitment to the future, and to each other, ushering in a new era of cooperation, quality workmanship and mutual respect.

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e assembly process, by listening to their suggestions and utilizing those suggestions, we've been ble to develop new and more efficient methods assembly, providing greater productivity, at a wer cost. By working together during the last vo years, like never before, we at Ford Motor ompany have achieved the highest quality rating any major American car or truck maker. Based on a Ford Motor Company survey of nearly 11,000 Ford and competitive 1982 new vehicle owners measuring things gone wrong after three months of ownership.)

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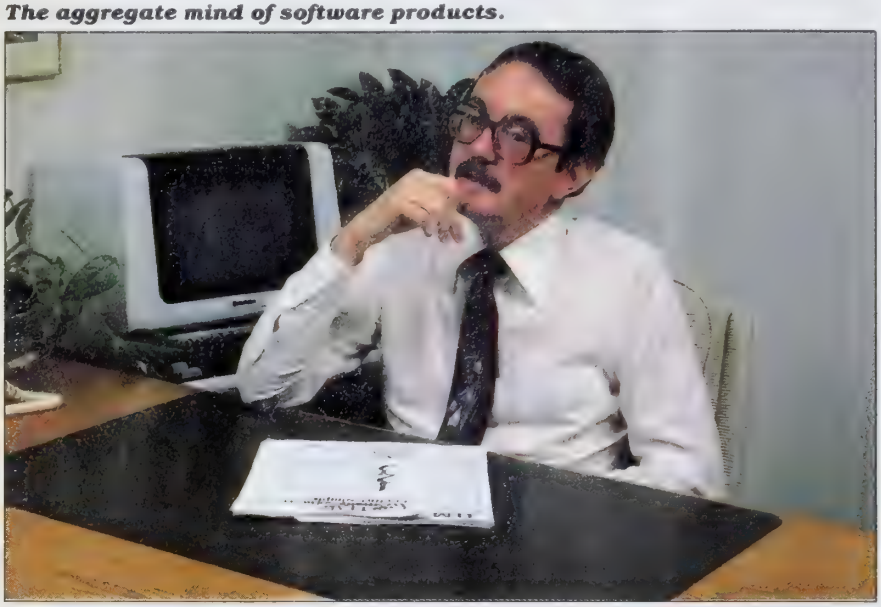
Technology

Like all agents, Acton sees himself as his client's white knight. "Somebody has to collect royalties," he says. "Someone has to make sure deals are negotiated fairly. One of the bestselling programs on the market today was sold to the publisher on a fee basis. That writer would have been a lot better off with royalties."

The Software Agency is negotiating with software developers to produce documentation, but Acton wants to focus on the more creative applications of software. "We're interested in finding the analog, if you will, to today's bestselling novel. But we want to go beyond games—at least, games in the Pac-Man sense," he says. "People who are engineers-cum-entrepreneurs wouldn't need us. We're closer to the independent contractor, the 'artist' who, like a novelist, wants to be at the keyboard but doesn't want to hassle with marketing and selling the product."

Interactive Tele-Marketing President Steven Cloudtree
The aggregate mind of software products.



Software club director

For $100, Steven Cloudtree and his associates at Interactive Tele-Marketing (ITM) in Lafayette, Calif. will do your software shopping for you. They'll ask you why you want it, who will use it, how much you already know about software. Then they'll consult their electronic library—what Cloudtree dubs "the aggregate mind"—of close to 2,000 products. They'll select the right package and sell it to you, often for one-third off its list price.

How can they do all that for so little? According to Cloudtree, the soft-spoken 35-year-old president of ITM, $100 is just enough dues to convince him a customer is serious. "And," he adds, "he's more likely to use the information than if it were given away." It's also economy of scale, since costs are shared by many ITM client "members."

Cloudtree currently employs 26 people and claims 600 members but expects ITM to be nearly twice that size by June, when the company will move into new, 12,000-square-foot quarters.

When not recommending software, Cloudtree pursues studies in futurology, the art and science of predicting the future. "People in a business environment make fairly short-term plans," he says. "Futurology goes 25 to 50 years out."

Computer lawyer

Stephen N. Hollman has, if you will, specialties within a specialty. He devotes much of his practice to business law problems affecting computer and high technology companies in the areas of contracting, financing and software protection.

But Hollman, a partner in the California law firm of Gullixson, Abrams, Hollman, McCroskey & Anton, doesn't believe in computer law. "It's an amalgam," he says, "of business law, intellectual property law, contracts and the Uniform Commercial Code, all brought together to meet the needs of technology."

If he denies computer law in the formal sense of the word, Hollman does acknowledge issues that are peculiar to the computer world. Copyright protection is one. "You may not reproduce software," he says. "But if there's an idea embedded in the software and if I'm clever enough, I can reverse engineer it and create a new program. It's a new facet of computers and law regarding software and software alone."

Hollman, 41, is one of about a dozen attorneys who are known for specializing in computer-related issues, and he does not expect to be joined by many more like himself. "You really have to understand the technology," he says. "I attend many technical seminars that have nothing to do with law." But he isn't joined by his fellow counselors: "I recently attended a software seminar that drew 650 attendees, and I was one of about three lawyers."

Law schools aren't picking up on the issues yet, either, Hollman says, except for some law review articles. He thinks the subject of computers and the law should be offered as an advanced elective. "Let students see how it is brought to bear on the technology at hand."

The sunlight that kills

In the struggle between mankind and the insect kingdom over which will inherit the earth, logic sides with the bugs. After all, there are about 4 million insects per acre; bugs existed some 350 million years before man, and they seem endlessly adaptable. Cockroaches, for example, shrug off radiation levels many times higher than man can withstand. It's enough to make you want to throw in the towel. Still, recent research soon to be published by Dr. Jacques Kagan of the University of Illinois at Chicago suggests man may yet have the late innings.

The basis of Dr. Kagan's optimism is a group of new organic pesticides that use sunlight to kill insects. Scientists have known for years that certain compounds react with light and oxygen to produce "singlet oxygen," an oxygen molecule whose electrons are so excited that it is toxic to most microorganisms. The combination of light with certain organic molecules has already been used to disinfect wounds, kill fungus in aquariums and, most recently, to treat psoriasis and some cancerous tumors.

But new research has shown that photosensitivity works on insects,

too. When sprayed on eggs and larvae, Dr. Kagan's compounds react with light and kill them with a burst of toxic oxygen. Several formulas work in combination with the sun's ultraviolet rays, which means they are effective even on cloudy days.

If fully developed and approved, the new insecticides could be a boon for pest fighters. Being sensitive to light, Kagan's compounds decompose and don't persist in the ecosystem like most insecticides. They also provide a new way of attacking insect strains resistant to conventional pesticides, and are even effective on bugs that aren't fazed by pesticides like DDT or dieldrin.

Commercial production is still a long way in the future, however. Though the compounds Kagan is studying appear to be safe—some exist already in plants, and one is on the FDA's list of chemicals approved for food, drug and cosmetics use—toxicity studies are just beginning.

Moreover, the only insects Dr. Kagan has tested so far are the fruit fly and the yellow fever mosquito. Both rapidly succumbed to minute doses of photoactive chemicals, which should bring cheers from veterans of California's 1981 medfly disaster. But Kagan holds out scant hope for beating the common cockroach: "Roaches shun light," says Dr. Kagan, "and they are tough beasts to kill. Don't hold your breath."—**Laura Saunders**

Hail to the orphan

It takes capitalized costs of about $70 million to bring the average new drug to market nowadays. To justify such expenditures, pharmaceutical companies concentrate their efforts on the "big diseases," such as heart attacks, peptic ulcers and hypertension, which run rampant through the population. But what about the little diseases, the obscure conditions, many genetically founded, that afflict only a few thousand people, rather than millions? Who pays for research on their cause and cure? Why, the government, of course. Who else?

Just as the last session of Congress was coming to its frantic end, a piece of legislation slipped through that provides for tax credits and grants to those companies undertaking research into what have become known as "orphan" diseases. The Orphan Drug law allows a total deduction of 73% from expenses for clinical testing—one of the larger segments of drug research costs—related to finding a cure for diseases with a low incidence among Americans. (President Reagan, in signing the bill, cited a figure of 200,000 cases as the cutoff number.) In addition, the law allows the federal Health & Human Services Department to grant up to $4 million for smaller firms and individual researchers.

In the welfare state good intentions have a way of turning into bad programs, and this may be yet another example. The term "orphan drug" is nowhere defined within the law, and the Food & Drug Administration, which will probably review requests for orphan status, has at this point only vague guidelines to follow. The 200,000 figure, for example, turns out to be presidential rhetoric rather than policy. In addition, the wording of the bill is vague: It requires only that there be no reasonable expectation of profit from making and marketing the drug in the U.S.

But many diseases that are rare in the U.S. are commonplace worldwide *(see below)*. Sickle-cell anemia and many parasitic diseases have a low incidence here but are major killers overseas. No matter. In the absence of implementing regulations to the contrary, their research in the U.S. can be subsidized.

The vague wording of the law even benefits existing drugs. Tagamet, SmithKline's profitable ulcer treatment, has succeeded in helping patients with hirsutism, a condition resulting from a hormone imbalance. Under the Orphan Drug law, if SmithKline decides to conduct clinical trials in this area, it qualifies for a tax break. And, even more ironically, if a drug originally given orphan status turns out to cure the common cold, all of the basic R&D would have already qualified for tax relief.

Despite its potential bounty, the drug industry looks with caution on the law. Dr. George Goldstein, corporate medical director of Sterling Drug and a member of the Pharmaceutical Manufacturers Association Commission on Drugs for Rare Diseases, says that the drug industry "supported the bill, and it's in the public interest to lessen the disincentives for finding cures. But what the industry really needs is extended patents and reform of the costly and time-consuming [FDA] approval process." Goldstein fears that the Orphan Drug Act may substitute federal giveaways for genuine reforms.

If experience is any guide, he may well be right.—**Christine Miles**

Great expectations

There are cures for most of the world's major parasitic diseases, but they are generally out of reach to Third World populations. The Orphan Drug Act could change that, and provide a bonanza to U.S. drugmakers in the process.

Disease	Prevalence	Location	Preferred treatment
Malaria	2.5 billion exposed, 13.5 million cases	worldwide	quinine dihydrochloride, quinine sulfate plus pyrimethamine plus sulfadiazine
Schistosomiasis	200 million cases	Southeast Asia, Middle East, South America	metrifonate†, praziquantel*, oxamniquine
Trypanosomiasis (sleeping sickness)	45 million exposed	Africa	suramin†
Filariasis	250 million cases	Asia, Africa, Americas	diethylcarbamazine
Onchocerciasis	20 to 40 million cases	Africa, Latin America	diethylcarbamazine
Leishmaniasis	N.A.	worldwide	stibogluconate sodium

*Available only on an investigatory basis.
†Available from Parasitic Diseases Division, Center for Infectious Diseases, CDC, Atlanta, Ga.

Sources: Centers for Disease Control; World Health Organization

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GTE

Sailing off Newport in blissful semiretirement, entrepreneur Jesse Philips learned of unfinished business back home.

And miles to go

By Lisa Gross

JESSE PHILIPS of Dayton, Ohio is living proof that you're never too old to make a mistake, or to change your ways and make a strong recovery. Philips, 68, is chairman and 12% owner of $296 million (sales) Philips Industries Inc., which has increased earnings 81% since 1978, to $11.8 million, on a 10% rise in sales of such products as aluminum windows and fiberglass bathtubs to the depressed housing and construction markets. It has done so well because Jesse Philips learned a lesson from a brush with bankruptcy in 1974.

Philips, then 59 and in his third year of semiretirement, was in Newport, R.I. as one of the major sponsors of the America's Cup entry, *Mariner*. Philips Industries, built from a jalousie manufacturer he had bought in 1957 for $200,000, had turned in $2.8 million profit on $203 million sales in 1973. Jesse Philips' original investment was worth more than $25 million, and he could well afford to own the $700,000 54-foot yacht *Charisma*. In fact, in 1974 he was in his second try at retirement. He had retired in 1956 with a net worth of $2 million, made from turning around losing department stores and selling them.

But retirement was not in the cards for Philips this time, either. A call to Newport from his Dayton headquarters told him that Philips Industries' banks were canceling its credit and calling in its loans. Philips had built the business during good times but had stepped away, leaving the company unprepared for hardship. While Philips' attention was on yachting, his then president continued his expansive ways, spending $9 million to build and equip a water-heater plant in 1972. It turned out to be one plant too many. When housing, mobile home and recreational vehicle markets dried up in 1974, Philips Industries quadrupled short-term debt to $24 million and doubled long-term debt to $40 million in a vain attempt to support its bloated 42-plant size. The company went into the red, losing $5 million in 1974. And the stock market noticed: By August 1974, the value of Jesse Philips' stock had evaporated to $3 million.

Jesse Philips of Philips Industries
He gave away his yacht.

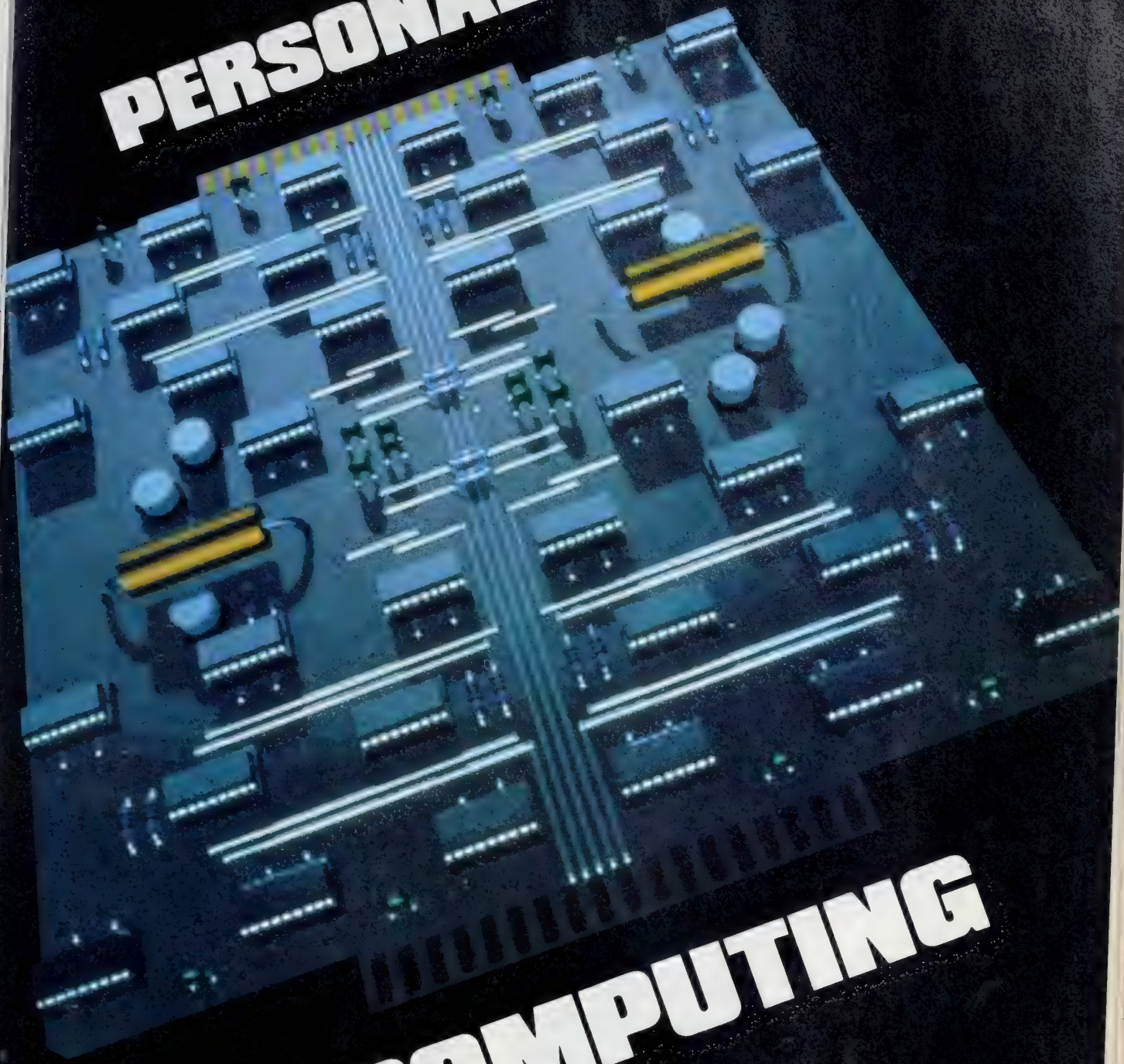
Philips returned to Dayton and convinced the banks to stick by him after assuring them he was back full time from yacht racing. Today, sitting in his spacious Dayton office lined with pictures of the *Charisma* (he gave the boat to the Naval Academy), Philips recalls that time. "With our business dropping, we had excess inventory, so we put a freeze on buying. Purchasing departments were closed. All orders over $500 had to be approved by me," he says. On the suggestion of his then executive vice president, now president, Robert Brethen, Philips closed six plants to save $2 million and bring the company back to break-even. He stuck with the water-heater plant for another year—a mistake, because it pushed Philips into the red by $8.8 million in 1975—before closing it, too. They eventually closed a total of 17 plants and distribution centers, lowering total fixed costs 20%.

Philips Industries began to be managed with a vengeance. White time cards tracked time on the assembly line; blue cards, time away from the line. Foremen checked the results and reported every morning. "We increased our productivity 10% to 12% by reporting," says Brethen, 56, a no-nonsense executive who spent 16 years at GM and was at Fuqua Industries before joining Philips in 1973.

Philips and Brethen used value analysis to reduce material costs, about 60% of Philips' total fixed costs. Twice yearly, teams of 15 to 25 people from each division—managers to truck drivers to secretaries—seclude themselves for five days to study four or five Philips products. Vendors are invited in on the third day. "We say, 'You tell me if we're doing this at the lowest possible cost,' " says Brethen. "The vendors come in at first sort of dubious, but by 11 a.m., they're into this thing." One salesman saved Philips $200,000 annually by suggesting that it use a cheaper new steel alloy for making props for air compressors. A Philips secretary asked why there were three colors of wire in an electric motor. No good reason, said the engineers. Changing that saved Philips $45,000 a year. Last year Philips saved a total of $3 million with these and similar changes.

But the biggest and most important change had come in Philips himself: Up to age 59, he was an entrepreneur, excited by the freshening breeze, bored by the careful tacking; after 1974 he became a manager, making his company lean enough to survive the housing downturns, strong enough to capitalize on the booms. These days Philips Industries' return on equity is a handsome 18.4%; its stock price, having trebled since 1981, is around 33 (Philips' own holdings are worth about $25 million); and Jesse Philips is given to didacticisms: "Making money is a state of mind," he says. "You have to do it with today's facts, not what you hope tomorrow will be." Sounds like another retirement, well earned this time, might not be far off. ■

PERSONAL COMPUTING



Prepared by Gartner Group, Inc.
Information Industry Consultants
Stamford, Connecticut

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PERSONAL COMPUTING: A NEW REVOLUTION

Driven by technological advances and falling costs, increasing capabilities, and a new group of computer users, a "personal computing" revolution is occurring throughout homes and businesses. End users, realizing significant productivity gains, have seized upon the personal computer (or microcomputer) as a cost effective method of increasing on-the-job effectiveness. Corporate and MIS management, most of whom were sitting on the sidelines during the initial stages of this revolution, are now providing impetus, policies, and implementation of personal computing, a new concept which embraces end-users providing information processing solutions on their own, on any type of equipment, microcomputer to mainframe, without the programming help and involvement of the corporate data processing department.

Because the personal computing revolution is still in progress, in fact just beginning, its outcome is yet unknown. Its short-term impact and long-term implications, though, are beginning to show themselves to vendors, maintainers (MIS), and users alike. As mentioned above, end-user demand is one of the principal driving forces of the revolution, and this implies radical changes in vendor and MIS organizations to respond to this demand. MIS will become the controllers of corporate data, rather than the manipulators they represent as chief programmers. Vendors must now supply hardware and software suitable for use by typical end-users, that is people whose jobs and interests have little to do with computers of any kind.

Computing solutions for this new class of computer users take many forms, from a centralized corporate mainframe-based Information Center to networked or standalone personal computers. Since large organizations have the greatest capacity to implement a variety of different solutions, we first focus on the key issues that impact personal computing in large organizations. The need to create awareness at the executive and managerial levels, support and servic of hardware, software, and end user control of corporate data and program knowledge of costs, and establishme of corporate policies all engender mar difficult problems.

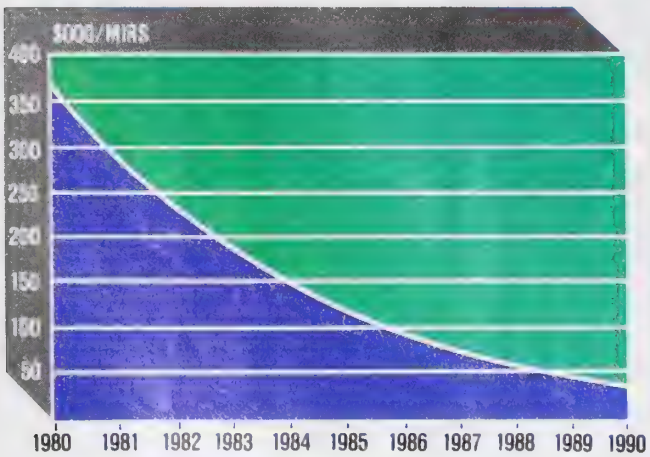
Productivity is the main reason for t frenzied attention paid to personal cor puting, as vendors, MIS, and users ali realize that end-user involvement c often produce cheaper and timlier sol tions than those available through tra tional channels. In particular, thoug personal computing seems to offer t greatest productivity gains for ma agement, the group of office worke who have, to date, benefitted least gains in computer and office autom tion. Where productivity gains can made on the managerial level is t focus of the second section.

Growth as a vendor with perso computing solutions occurs against backdrop of an exploding marketpla There are significant new business o portunities as well as potential pitfalls, in a highly competitive marketpla

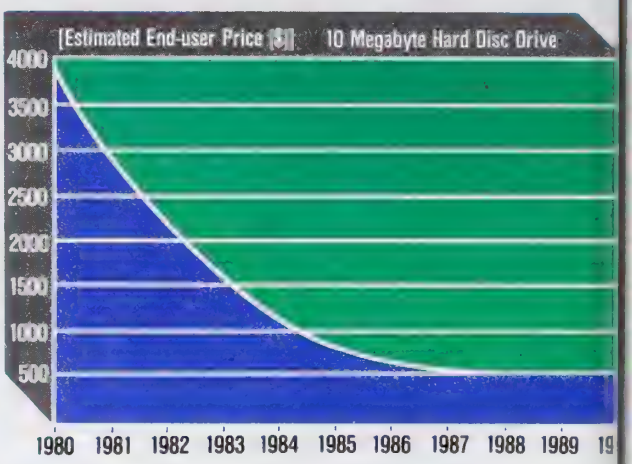
THE TECHNOLOGY DRIVING PERSONAL COMPUTING

As The Cost Of Computing Power Continues To Decline Through The '80s. . .So Will The Cost Of Data Storage.

Cost of Computing Power



Cost Of Hard Disk Storage



The declining cost of computing power has been an historic feature of the computer industry. However, advances in semiconduct technology has greatly helped to accelerate that trend during recent years. Data storage technology has kept pace by compressing ev increasing amounts of information onto storge media and speeding access to the data stored on it. Together, these enhancements perr personal computers to perform increasingly sophisticated range of tasks.

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ALTOS COMPUTER SYSTEMS

Section three highlights the changing face of the computer industry brought about largely by personal computing.

Since demand for product is so great, new vendors enter the market every day. Every industry has its leaders, though, and we examine the principal strategies of four key vendors for insights into the entire industry. Undoubtedly a vendor shakeout will eventually occur, as users will require consistent and far-reaching support, compatibility, and continuous access to new products. Vendors unable to provide these elements will surely fall by the wayside.

In conclusion, "Personal Computing" takes a look at some of the long-term effects of the personal computing revolution.

PERSONAL COMPUTERS IN LARGE ORGANIZATIONS

Just two years ago, many MIS managers were reluctant to accept personal computers, believing them neither powerful nor fast enough to solve users' problems, particularly compared to central site mainframe alternatives. This was a bad miscalculation, as the price performance advantages of personal computers has become readily apparent. Thousands of micros (mostly Apples) have found their ways into large organizations by the "end user end-around", that is, users purchasing systems under typewriter or miscellaneous office equipment budgets, or simply bringing their home computers to the office.

Awareness among MIS managers has been heightened since then, and microcomputers are beginning to arrive in large organizations more by management directive and less through grass roots acquisition. Despite the often held view that executives would be the hardest to sell personal computing, we now see many examples of upper management acting as the impetus for emerging corporate-wide personal computing strategies and policies.

In this section, we will raise some of the issues and considerations every large organization must address regardless whether management views personal computers as a problem that won't go away or an opportunity that cannot be missed.

Creating Awareness (At The Right Level)

Creating computer awareness means much more than convincing management that personal computers are a permanent fixture of the corporation. Personal computers are rapidly evolving from elementary general purpose tools to very sophisticated, highly functional workstations tied through networks into major corporate databases. Accordingly, management must become sensitized to the whole panoply of issues raised by literally thousands of computer-illiterate personnel awakening to, and exploring the possibilities opened up by having computer power at their fingertips. Only the organization's decision-makers can speed implementation of personal computing. Only those same decision-makers can make the tough choices that are necessary to keep a difficult transition period from falling into chaos.

Procurement

Centralized procurement procedures can go a long way toward reducing (if not eliminating) the problem of having a company permeated by computers of every make and model. As microcomputers quickly migrate from the standalone mode commonly used today to becoming the basic intelligent terminal employed by most users, such patchworks of disparate equipment can develop into a frustrating and costly Tower of Babel for the large organization. Centralized procurement policies not only help enforce the purchase of qualified systems, they also allow access to the volume discounts offered by most vendors and ensure that important financial issues (e.g., acquisition funding, tax credits) are properly addressed.

What Are The Costs

It is essential to understand the actu costs implicit in a large-scale implemen tation of personal computers. Many pe sonal computers have entered larg organizations through departmental fund ing; their expense has been justifie almost exclusively on the basis of ind vidual productivity gains from stand alone applications. Utilization of micro will increase dramatically, however, a users recognize advantages in sharin data and using data from corporate data bases. These new capabilities wor come cheaply, though (see chart). Mar agement must understand that differen implementation options have differen costs, benefits and drawbacks.

Selecting A Vendor

If users follow traditional practice, the will focus on a select group of vendor Factors to be considered are a vendor financial viability, whether the vend has the resources and managemen capability to develop future state-of-the art products on a timely basis, and course, the user's current and futur requirements.

Some important considerations whic carry different priorities for each us include communications requirement software requirements, compatible product evolution, and migration path from current products. Communication issues, such as the short-term and long term needs to interface with Local Are Networks (LANs) and corporate info mation networks, will also surface a considerations in the vendor selectio process.

Personal computers are usually perceive as a $2,000 to $5,000 expense item. How ever, even in standalone configurations th costs can mount up. Integrating standalon workstations into corporate networks w LANs and other communications gear ca make the costs far higher. Though thes costs should continue to decline (albeit different rates), waiting for the ultimate sol tion at the lowest eventual price can be a expensive decision.

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The COMPAQ Portable sells for hundreds less than a comparably equipped IBM or APPLE® III. Standard features include 128K bytes of internal memory and a 320K-byte disk drive, both of which are extra-cost options on the IBM. Memory and additional disk drive upgrades are available options to double those capacities.

In the standard configuration, the COMPAQ Computer has three open slots for functional expansion electronics as your needs and applications grow. It accepts standard network and communications interfaces including ETHERNET™ and OMNINET™.

If you're considering a personal computer, there's a new question you need to ask yourself. Why buy a computer that *isn't* portable?

For more information on the COMPAQ Portable Computer and the location of the Authorized Dealer nearest you, write us. COMPAQ Computer Corporation, 20333 FM149, Houston, Texas 77070. Or call 1-800-231-9966.

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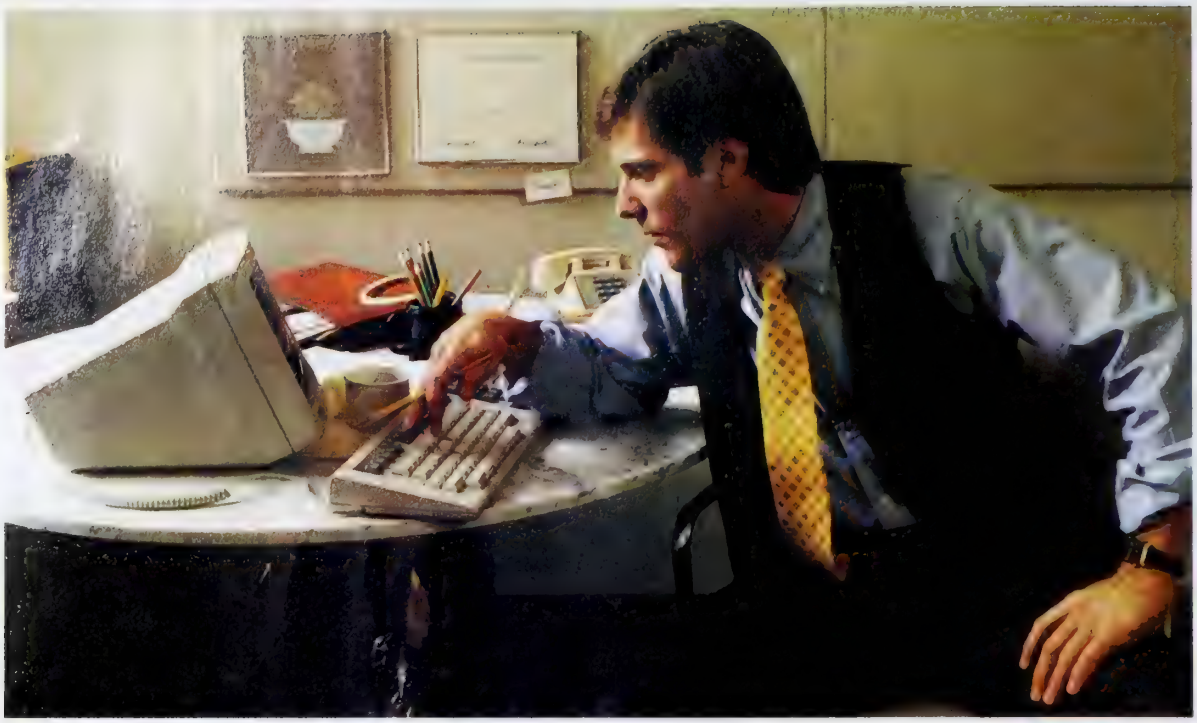

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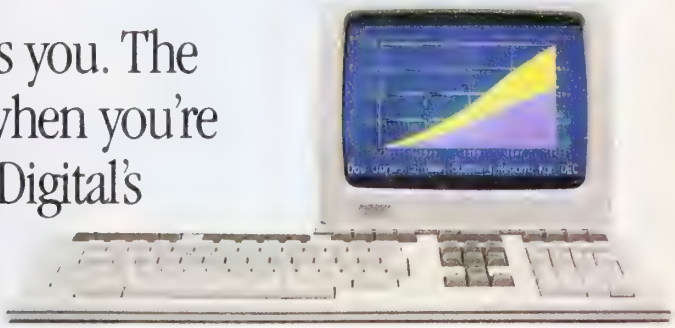

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The Real Costs Of Personal Computing *Source: Gartner Group*

Managing The System

Perhaps the most difficult problem facing MIS departments (or whomever is spearheading microcomputer implementation) is effective asset management. This includes effective utilization by the end user, as well as more global concerns such as auditability, privacy, and security.

The implementation process usually starts with some part of an organization bringing in personal computers. End-user support requirements shift implementation details to MIS, or sometimes to an office automation group to coordinate information exchange and support functions. This in-house expertise helps match user needs with available applications programs and provides users with at least some of their training needs. Of all corporate departments, MIS is best equipped to manage the personnel and projects related to personal computer implementation. Auditability, privacy, and security are all critical issues that may not be considered seriously until problems arise. Yet, most DP managers know that it is less costly to address such potential problem areas up front, before they get out of control.

During the last decade, computer audit staffs have made significant progress in developing auditing tools to work with the major programming languages and applications packages. However, the advent of personal computers has greatly accelerated the growth of applications packages and language implementations. This onslaught changes audit-staff requirements, and exposes new liabilities.

The issue of privacy is a double-edged sword. The user benefits from the ability to maintain personal data. However, this raises the following corporate privacy issues:

- What information can be kept in a user file?
- Is host data updated by rekeying, or will the micro be connected directly to the central site database?
- With user access to data, how d data integrity be ensured?
- How can misuse of corporate d be prevented?
- How is data security maintained?

Maintaining data security will char drastically if control is dispersed. Ma agement will be forced to set up rigorc and possibly costly procedures to p tect proprietary information. Data-a cess procedures must be establish as well as procedures to prevent (o least discourage) employees from wa ing off with confidential informati Further, management must also prot hardware, as the size and dispersior these assets make tempting targets the sticky-fingered set.

Management and control of the cha ing data processing environment require new techniques. In the "old" d processing world, processes were e ier to establish and maintain since was centralized. Even enlightened c porations that recognize these proble will have difficulties, especially sir workable techniques have not pass the test of time. Moreover, the costs establishing the required security, d assurance and auditability are not f known.

Finally, large-scale personal comp ing raises a host of legal issues, ma still unresolved, that may prove v messy, such as:

- Definition of corporate vs. persc data.
- Program ownership.
- Company liability if software pa ages are copied illegally.
- Using software programs on multi machines.

Establishing company policies is important first step in a planned atter to bring microcomputers into an orga zation. The issues raised above, thou obviously incomplete, highlight the v complexity and potential risks that inherently part of the process.

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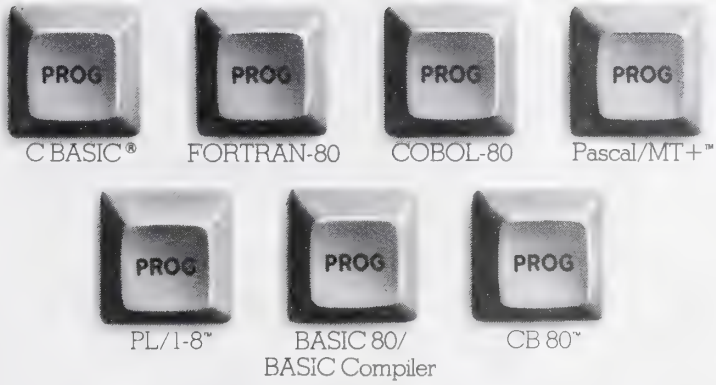

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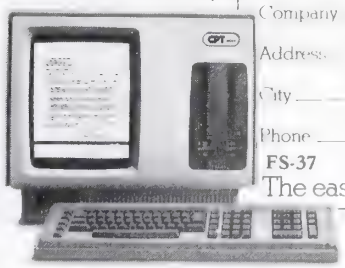

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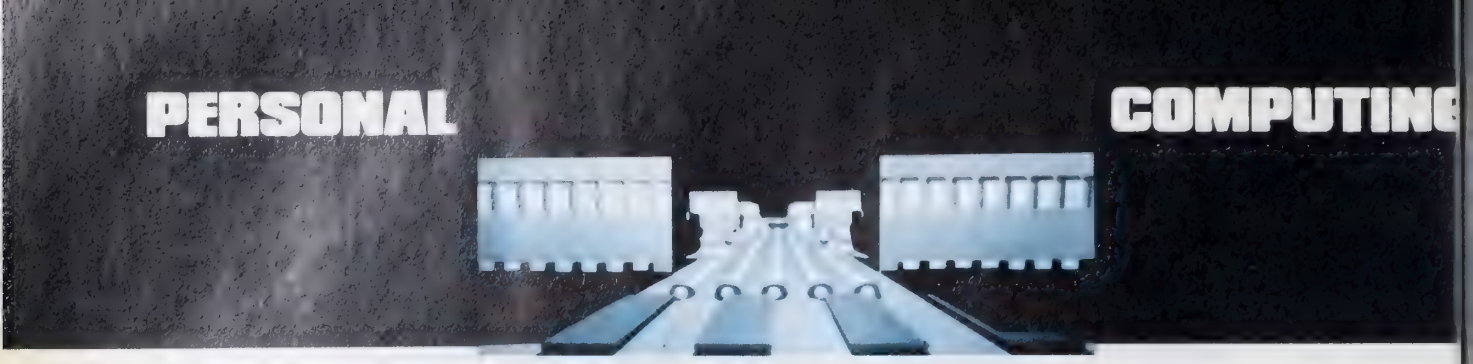

MANAGERIAL PRODUCTIVITY

Managers and executives are interested in personal computers because they perceive them as simple, cost-effective tools that can increase productivity. While tremendous effort has been spent to automate the functions of bookkeepers, clerks, and secretaries, little effort has been made to increase managerial productivity through automation. This fact itself is worthy of comment, since white collar salaries constitute the largest part of the office budget. The phenomenal success of programs such as VisiCalc has caused authors to turn their attention to automating the professional—through a personal computer.

The executive, manager, and professional alike spend a good portion of their day communicating in a variety of ways. Part of the time is spent gathering and disseminating information. Part is spent transforming information into different forms, through calculation, aggregation, and other techniques. These activities can be greatly enhanced with a personal computer. Links to the corporate host computer, a variety of public databases, and other personal computers provide current, "live" data for analysis. Micro-mainframe software provides a secure, easy-to-use environment from which the personal computer user can extract data from these sources.

Integrated operating environments (IONs) provide new data manipulation capabilities for the manager. They make it easier to be proactive rather than reactive, as they simplify projections, forecasts, and trend analyses. Graphics capabilities convey in pictures things that tables of numbers cannot. The IONs of today will shortly have far greater capabilities. Integrated with them will be calendars and other common applications "required by every executive" (see sidebar).

Managerial productivity does not limit itself to data and text manipulations, though. Telephone activities, an important part of everyone's day, will also be

TOOLS FOR MANAGERIAL PRODUCTIVITY

Key software programs have played important roles in the personal computer revolution. Microsoft's MBASIC, Digital Research's CP/M, and VisiCorp's VisiCalc all harnessed computer power for users. Two important generic tools have emerged to lead the next generation: the "integrated operating environment" (ION) and the "micro-mainframe link."

Integrated Operating Environments

ION's are computer programs which provide the user with a simple method of switching between several common functions, while retaining elements of command and file compatibility. ION's are characterized by ease of use, on-line (accesible) "help", and their ability to manipulate data in several forms: text, numeric, and graphic.

Lotus Development Corporation's 1-2-3, currently the most popular ION available commercially, integrates spreadsheet, graphics, and data-management functions. So does Context Management's MBA software package. Apple Computer's Lisa computer system will integrate these, and several other functions including a project manager, a free-form drawing module, and a word processor. VisiCorp's VisiON is made to work on several different computers and includes a "mouse", or desktop pointer device that significantly reduces the need to use a keyboard.

The Micro-Mainframe Link

Managers require access to corporate data to make projections, analyze trends, and confirm. Data from mainframes is desirable for several reasons, including lack of duplic tion, quality of data, and currency data. Several products provide the services. MSA's PeachLink commu icates between mainframes runnir MSA on-line systems and a person computer. Data selected from a mai frame screen is stored in the person computer, where it can be used lat by different Peachtree software pr ducts, including PeachText, Peac Calc, and Business Graphics.

VisiCorp has two products in th area. VisiLink permits extraction data from McGraw-Hill's Data R sources, Inc. VisiAnswer is a ne product announced jointly with I formatics General Corp. It has tw parts, one of which runs on each pe sonal computer and the other on th corporate host computer to whic they are attached. VisiAnswer cul its data from several popular corp rate database products running c IBM mainframes. Both products pe mit the use of extracted data wi other VisiSeries products.

On the hardware front, while IB was announcing the new capabili for its huge installed base of 327 terminals to also emulate the Pe sonal Computer, a relatively unknow company, TAC, was providing th means for IBM PCs to emulate 3278 through IRMA, a circuit board whic fits into the PC. While IRMA on provided local access to IBM mai frames, its newest product, IRMA LINE, offers remote access not ju for the PC but for the popular DE VT-100 terminal line as well as th Apple II and, significantly, the App Lisa.

Jack Ka

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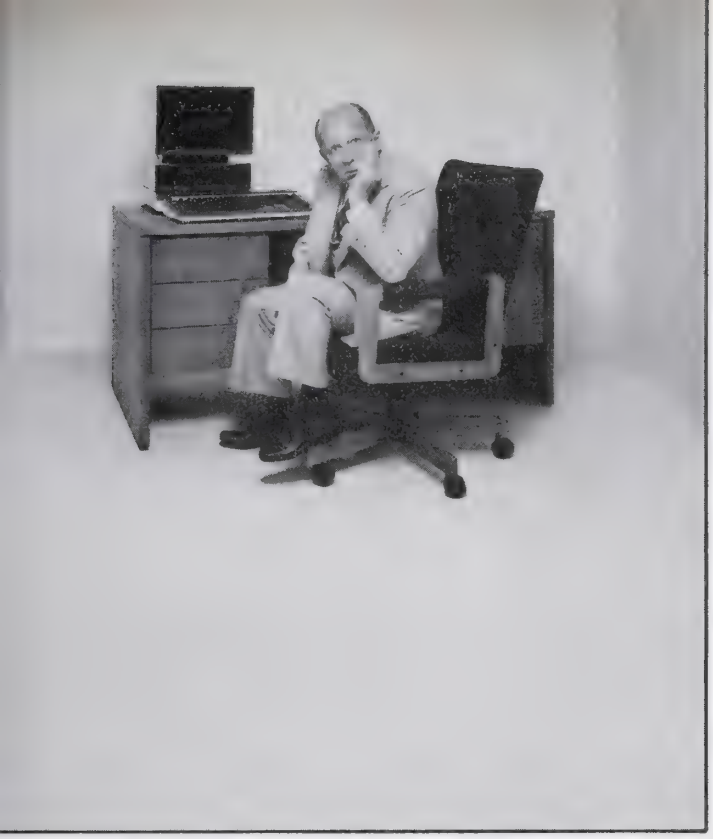

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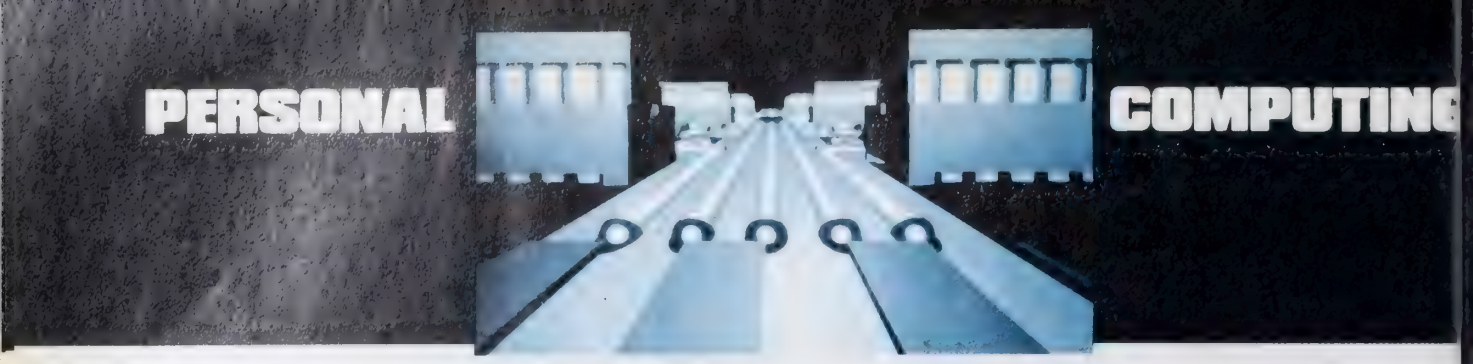

automated. Texas Instruments recently announced voice store-and-forward for their Professional Computer. These capabilities permit the personal computer to emulate a phone-answering machine. Also announced was a hardware and software subsystem which permits voice input to the computer with natural language recognition. No longer will using a personal computer require typing skills. This is a natural productivity gain for managers, most of whom do not type; all are accustomed to giving orders, though, to man or machine.

Other features, such as electronic mail and personal computer conferencing, will also help the manager to communicate. Electronic mail lets an individual create, store, receive and forward any document or data stored on the system to any other personal computer attached to the system. The ability to send messages to any of several mailing lists will also be useful for computer conferencing. Voice or keyboard input can be forwarded to all the participants in an electronic conference who are not necessarily required to respond in real time.

Every executive has one "hot" file in his desk—all the top priority items. Falling costs of mass storage and increasing processing power imply fast access through personal computing to a far larger number of "hot" items. The ability to collect, process, and distribute th information electronically, rather tha manually, means a significant (incred ble as it seems, perhaps a tenfold (more) gain in the productivity of th important sector of white collar worker

PORTABLE PERSONAL COMPUTING

The improvements in micro-electronic technology which produced personal computers do not end on the desktop. Over the past twenty years we have seen the size requirements for computers fall at a rate exceeding twenty-five percent per year. This means that a computer of a given processing power shrinks to 1/10th its original size every eight years, and 1/100th of its original size every sixteen years. It can, therefore, be projected that today's IBM 3033 mainframe computer will fit in a one-inch cube by the year 2000.

The implications for personal computers is just now beginning to be felt. Starting with the success of the Osborne portable computer, the industry quickly realized that the portable computer was a not only a bona fide market, but a very substantial one at that. Non-Linear Systems' KAYPRO product soon became the second most popular full-function portable on the market. Now, one can write memos and reports, perform order entry and do spreadsheet analysis in airplanes, taxis and hot rooms.

The next generation of portab computers promises to achieve ne levels of portability. For instanc MicroOffice Technology's PortaWr ter easily fits inside a briefcase ar can store up to twenty pages of tex Once back at the home office, th PortaWriter connects to a typewrit that prints out the memory content Olivetti will market the MicroOffic product under its own name, callir it the ETV-100. Grid Systems, th Cadillac of portable computers, o fers an ultra-thin computer with high resolution screen that display quality graphics. Other vendors wi portable computer offerings includ Compaq, Epson and Tandy. Inasmuc as there are literally hundreds applications suited for portable con puting power, involving hundreds thousands (if not millions) of user this market is one that should co tinue to show high growth over con ing years.

Ken Smalheis

VENDOR STRATEGIES IN AN EXPLODING MARKETPLACE

The exploding personal computer ma ket has continued to exceed the predic tions of even the most bullish industr observers. Demand has been growin at an accelerating rate, and only a sma portion of it (5% at most) has been satis fied by entry level products. Variou

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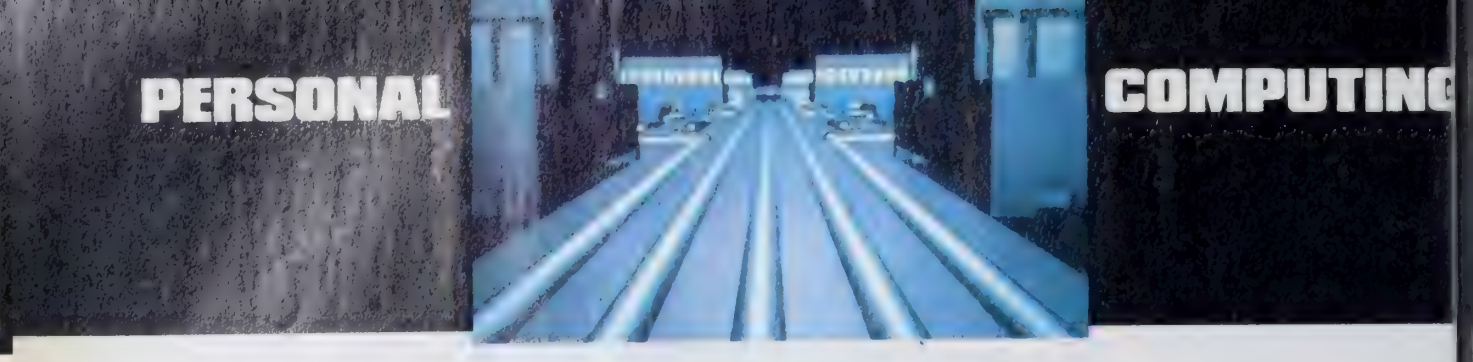


forecasts peg the 1983 micro market at slightly over $4 billion, but it would not be surprising if the actual figure ends up at $6 billion or more. Corporate orders of 1,000 units or more are becoming commonplace, of note being GEISCO's recent order for 10,000 IBM PC's.

The number of micro vendors is approaching two hundred, and it is apparent that spiraling demand will not only postpone the long-awaited industry shake-out but continue to attract even more players at the producer level. However, competitive pressures will begin to heighten this year, leading to accelerating consolidations in various sub-markets, albeit at different rates.

The microcomputer explosion has dramatically changed many accepted principles of the computer industry. Almost overnight, the industry has gone from one characterized by a few high-priced sales (in the millions) to many thousands of low-priced sales (in the few thousands).

Of course, mainframe computers are still sold in the traditional way (namely, direct marketing by company reps) and the demand for mainframes as well as minicomputers will be sharply spurred and *not* reduced by proliferating micros. Although many volume sales of micros are handled like mainframes, the prospect of producing and shipping literally millions of computers each year has exerted and will continue to exert strong pressures on the computer business.

Before surveying the prospects for the leading suppliers, let's look at how the industry has already changed, concentrating on the new "imperatives for success" in this business.

The Battle For Distribution Channels

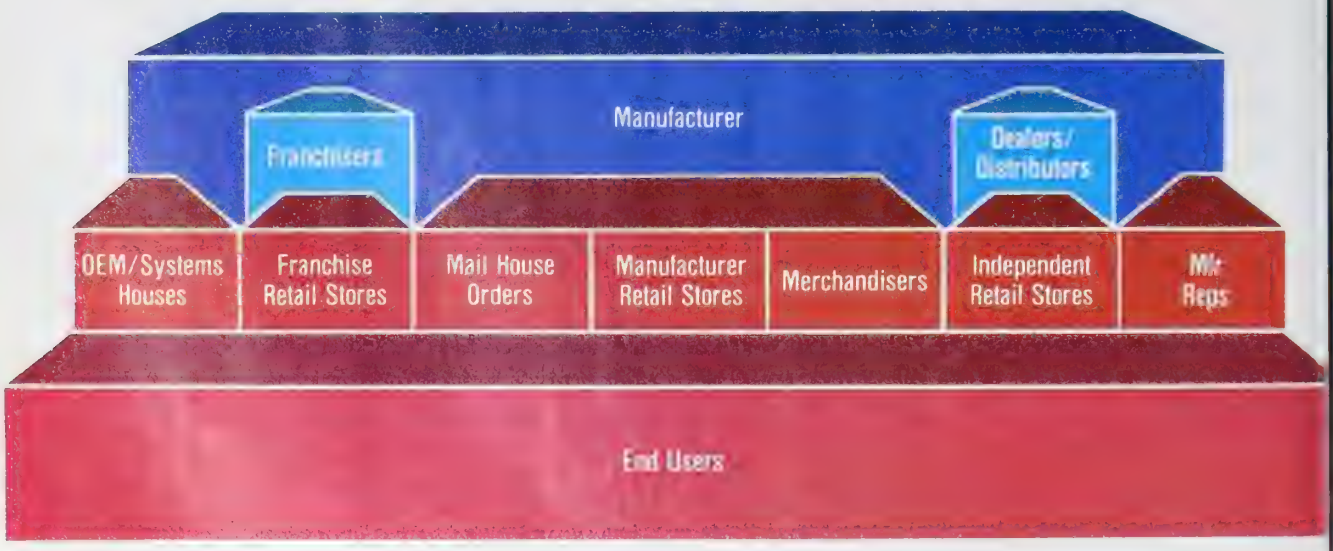
Although product features will remain an important consideration, merely sporting a capable, competitively priced micro with a wealth of software does not guarantee success without access to distribution channels to end users. Clearly, the personal computer explosion has impacted existing channels and helped to create new ones. The vendors that protect and expand current channels and blaze new distribution trails are the ones likely to emerge as eventual winners.

Computer retail stores remain t leading distribution channel and shou handle nearly half of all micros shipp this year. Although independent stor are the dominant factor at this level, t largest single retail entity is Compute land, the super-franchiser which recen opened its 400th outlet. With aggressi plans to open approximately 250 mo stores this year, Computerland has be effective in reaching not only the hom and small business markets but t large business market as well. T Stamford, Conn., Computerland out for example, offers training and suppo services that meet the needs of larg corporate users and it counts sever Forbes 1000 companies among it client

One new retail channel vying to ste some of Computerland's thunder is t computer mart, which is essentially shopping center comprised of vendo specific stores.

By providing a wide range of compe ing products (Boston's BOSCOM, sche uled to open in March, 1984, is gearin up for 300 companies with permane showrooms), computer marts offer or place for consumers to become edu

Principal Microcomputer Distribution Channels



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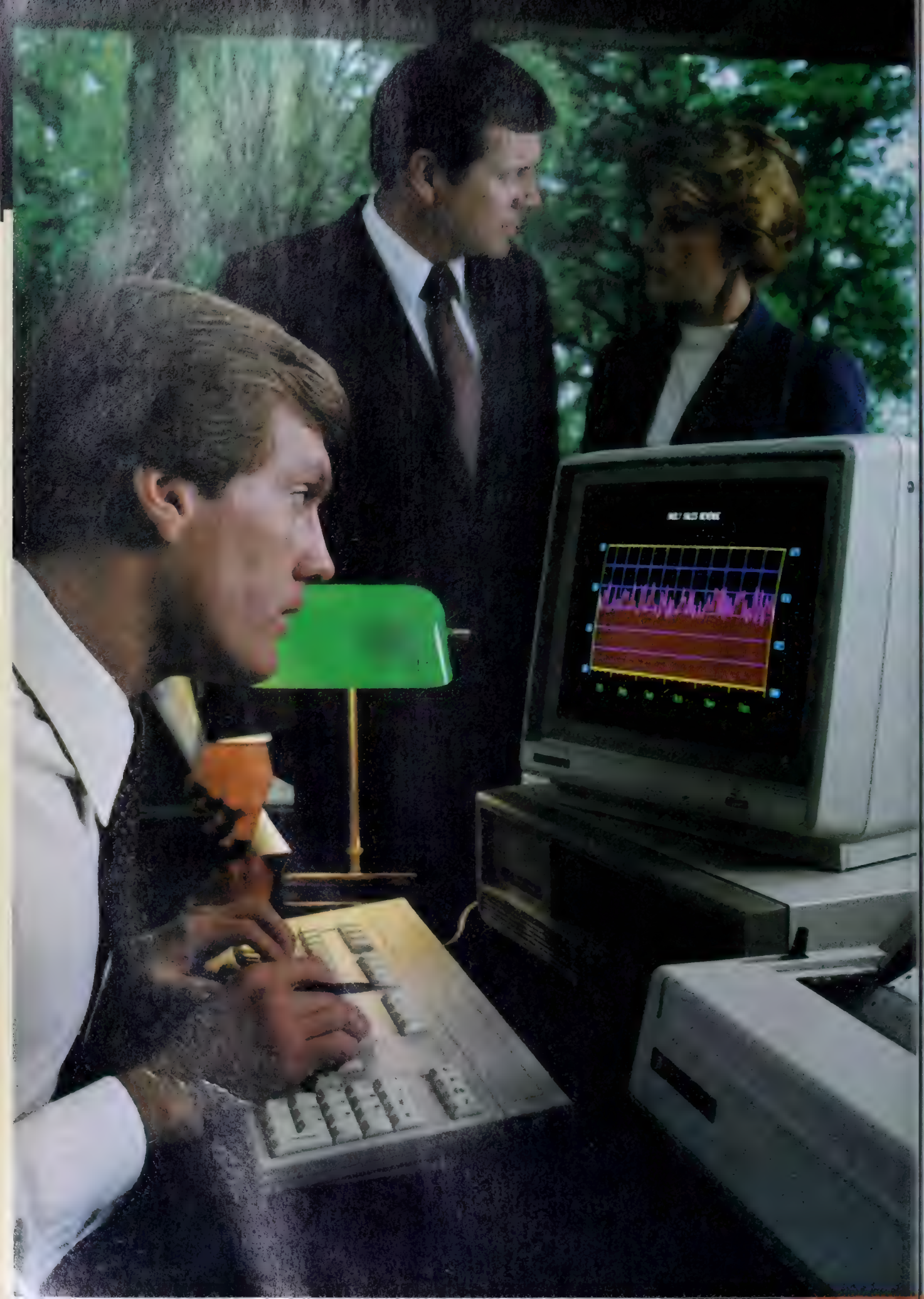

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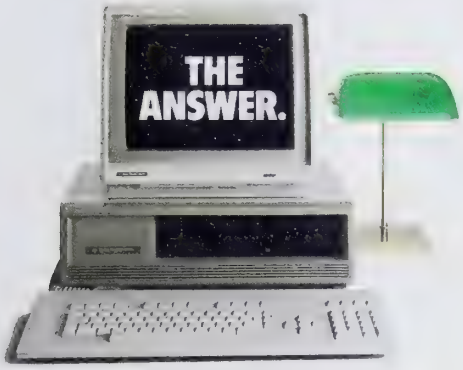

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4K byte graphics display memory
5-slot expansion bus

Keyboard
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Popular typewriter layout
97 keys, including 12 function keys
Separate numeric keypad and cursor control clusters
Tactile response, for quick positive entry
Upper- and lower-case letters

Display Units
12-inch monochrome (green phosphor) or 13-inch full-color, 25 lines x 80 columns
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Built-in 320K byte diskette standard
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Communications Options
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TTY, 3780
3270 SNA stand-alone (Summer 1983)
3270 BSC and SNA cluster (Fall 1983)

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** $3000 in Canada.

PERSONAL COMPUTING

ed (various classes, from profession-
ented seminars to general hands-on
ning facilities, are envisioned), and
mpare products. A similar facility,
FOMART is planned to open in Dallas,
o in March, 1984.

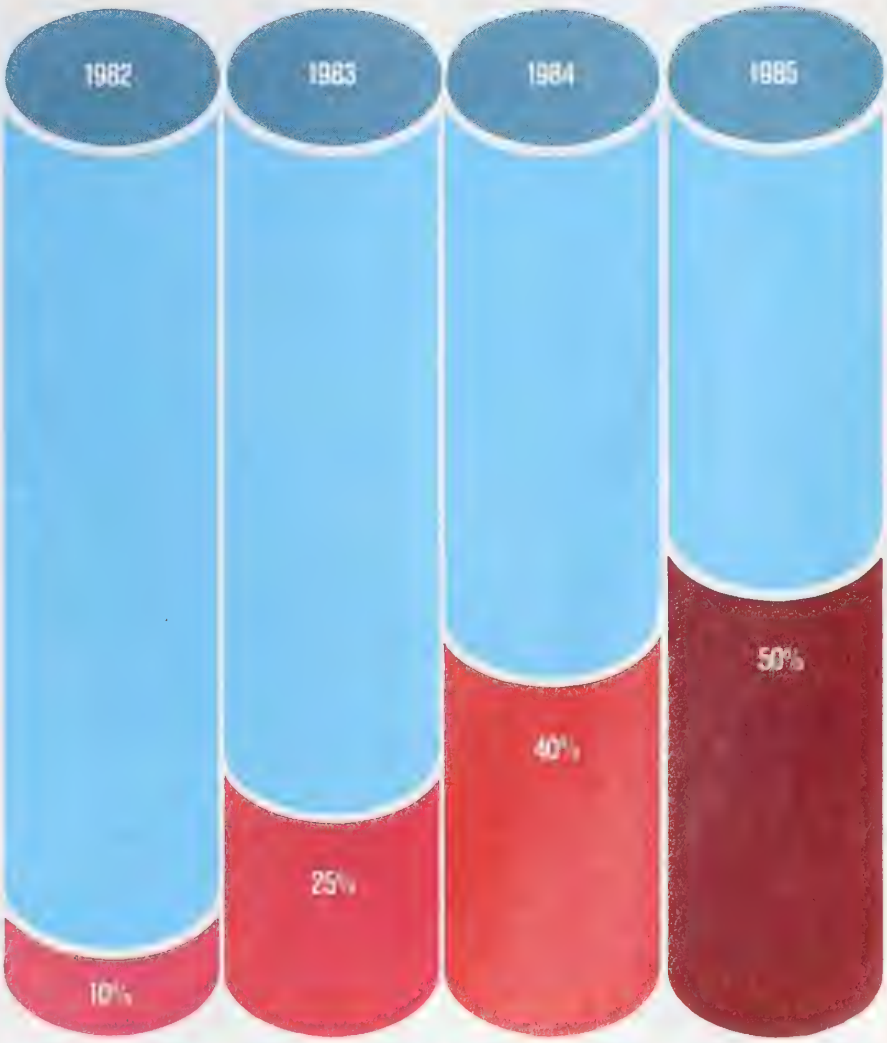
However, unlike computer marts,
mputer retail stores cannot carry
re than four or five product lines eco-
mically. As this fact became increas-
ly apparent to retailers towards the
d of 1981, existing lines were pared
wn and new ones scrutinized very
efully before being adopted. The bat-
for shelf space was on. And after IBM
ered the arena, it became clear that
en the growing number of retail outlets
uld not be able to handle the antici-
ed huge demand for micros. This
ved to intensify the competition for
ailable space.

One response by the large manufac-
ers, notably Xerox, IBM and Digital
uipment was to open their own retail
lets. By the end of 1983, IBM will have
ened nearly 200 IBM Product Cen-
s compared to 15-20 at the start of the
ar. Tandy, though, possesses a distri-
ion network unparalleled in the indus-
Its more than 8,000 Radio Shack
lets and computer centers have
ved Tandy well by providing a wide-
ching distribution channel.

Another important distribution chan-
for the business markets is through
ue-added resellers (VARs) which buy
dware in quantity, add software, peri-
erals and other features, and usually
rket the finished product under their
n name. Manufacturers who sell ex-
sively to VARs do not have the high
erhead associated with maintaining a
es force and can thus devote most of
ir time and attention to research, de-
opment and manufacturing efficiencies.

Convergent Technologies, a supplier
state-of-the-art workstations to Bur-
ghs, NCR and a host of smaller supp-
s, recently added Prime Computer to
growing list of resellers. Convergent
hnologies is committed to remaining
at the leading edge of technology and will soon introduce two new products, a micro/mainframe to be integrated with its multi-user/multi-tasking workstation and a portable computer. However, unless and until it establishes its own distribution channels, its fortunes will be tied to the fortunes of its large customers. Another important supplier to resellers to small and medium-sized businesses is Altos Computer. Altos plans to address the large business market through large dealers and, in time, its own marketing force.

% Of Business Personal Computers Sold With Hard Disk Drives



As new integrated software becomes more popular, 5¼" hard disk drives, that can store several times the amount of data as can flexible, (or "floppy") disk drives, and can access data much faster, will be considered an essential feature by many business users. Rapidly falling prices (currently at about $2,500 retail that should drop to about $1,000 by 1985) in a market that is very price sensitive will help fuel demand.

PERSONAL COMPUTIN

Micro Merchandising

As a commodity business, success in the micro market has a lot to do with product differentiation (with increasing reliance on advertising), becoming a low cost supplier, and being able to respond to shortening product life cycles.

1982 may be remembered as the year that the computer industry discovered Madison Avenue. With advertising blitzes carried in all the major media, companies such as Apple Computer, IBM, Digital Equipment, Texas Instruments, Radio Shack, Burroughs, TeleVideo, Commodore and Atari battled for the high ground in consumer awareness.

Although advertising agencies certainly welcome the business, they have come to appreciate the problems associated with an immature industry characterized by constant change and short product cycles. It seems that by the time an advertising strategy is transformed into actual ads, the approach is often considered obsolete. This requires more study, planning and of course, new ads. Another problem is that many of the newer computer firms have had significantly less marketing experience than their counterparts in other consumer oriented industries. Some have addressed this gap by hiring executives with experience. Two notable examples are Osborne Computer, whose President and C.E.O., Robert Jaunich held the top spot at Consolidated Foods, Corp, and Apple Computer, whose new President and C.E.O., John Sculley, was the former Chairman and C.E.O. of Pepsico. Whatever the case, you can be certain we will see much more of our friends Charlie Chaplin, Dick Cavett and Bill Cosby in 1983 and beyond.

Price Competition

Historically, the computer industry has not been known for strong price competition. IBM enjoyed hefty margins on its sales and its mainframe competitors were able to make market inroads largely by being substantially cheaper than "Big Blue". All this has changed by micros, helped along by IBM's "new look" (i.e., post-antitrust suit). Its recently announced new personal computer, the XT, is targeted at the business markets and offers impressive capabilities. But more important was the XT's aggressive price tag, making it the first hard disk system in its class to crack the $5,000 barrier. At the same time, IBM cut prices on the Personal Computer by 15%. Several competitors, such as Apple, Wang, Xerox and Zenith, soon followed suit with price reductions of up to 26%. By this action, IBM announced its intention to become a price leader and thus compel the competition to contend with its formidable manufacturing capabilities. Nevertheless, Gartner Group believes that while several marginal suppliers may be squeezed out of the market, IBM's aggressive pricing will help spur latent demand in more price-sensitive markets.

What IBM is doing to the business markets, Commodore, another vertically integrated vendor, is attempting in the home market. Both of these price leaders may have an eye on the several Japanese companies, notably NEC, Fujitsu and Toshiba, who will undoubtedly apply the all-too-familiar Japanese market share strategies that have worked so well in other industries. Though yet to make serious inroads in the U.S., "Japan, Inc." looms large on the horizon for 1985 and beyond.

An Era Of Shortening Product Cycles

As we continue to progress along our technology learning curves, as shown in the two charts at the beginning of this article, new breakthroughs in integration (i.e., combining voice, image, data and text into new applications) will occur at an accelerating rate. Therefore, it is imperative that suppliers seeking to establish long-term market presence have the capability to respond quickly to such advances. Moreover, vendors will be under constant pressure to anticipate technological gains and resulti market realities and plan migration pat for current and succeeding products.

Niche Markets

The microcomputer revolution will crea literally hundreds of market niches various sizes and longevities. One m ket niche to emerge in 1982 that pro ises to really blossom this year is multi-user workstations. They are ge erally very powerful systems, priced the $8,000 to $12,000 range, that per several users to share resources. M also include multi-tasking capabiliti which, by employing multiple proce sors, allows the computer to work sim taneously on different tasks. Posing direct threat to many minicomput based applications for end-users, c rent leaders in this estimated $500 r lion market (up from $200 million 1982) are Convergent Technologi Altos Computer, Fortune Systems, Wi Systems, Cromemco and Alpha Mic

However, some niche markets challenged by the advent of increasin functional personal computers. One these is the standalone word proc sing market, where companies such CPT, NBI, Lanier, Compucorp and Mic enjoyed heady growth over the p several years. How these compan move towards expanding their pr ence into other markets is very intere ing to observe. Compucorp, believ that the answer lies in delivering qua software, has introduced DBMS1 wh integrates data and word process with its top-of-the-line Omega w processing software. DBMS1, which run on 8-bit personal computers, is geted at a wide range of horizo applications. Exxon Office Syste which remarkets Compucorp's produ under its own name, will emphasize marketing and service strengths to g market share. Its entry level 500 In mation Processor will be integrated a professional workstation later this y that will capitalize on the graphics ca bilities of its new ink jet printer.

History will record as a profound irony
that the most powerful word processing package
ever created for the IBM® Personal Computer
wasn't created by IBM.

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15 pointed questions to ask MSA or any software supplier

Save this box. It can help you make an intelligent software decision.

1. Can you offer us a complete range of software systems designed to work together?
Or will we have to piece together a patchwork of systems?

2. Are your systems just record keepers, or can they really help us make decisions?
Can we pull together information from any of our integrated systems? In exactly the form we want it?

3. Can you provide business software for both mainframe and microcomputers?
Do you develop this software yourself or do you simply market it for another company?

4. Are your systems truly online so all of our information is current?
How many of your systems are online? How secure are they?

5. Will my company have to be be the one that discovers the bugs in your brand new system?
Just how long have your systems actually been used, and how have they been tested?

6. Will you update your systems as technology advances and regulations change?
What are some of your most recent updates? Will you keep us current on regulatory changes?

7. Do your systems really do everything you say they will?
Or will we have to change them or add to them to get the features we want?

8. How long have you been in business?
What are your revenues? What is your growth record? Where will your company be five years from now?

9. How many systems has your company installed?
How many of these were installed in the past six months? How many of your earlier customers are still using —and liking—your systems?

10. Do your financial systems handle unlimited foreign currencies?
Do your financial systems use a common set of currency exchange rates?

11. Can you link my personal computer directly to our central computer—so I can get my own information?
Is that software available right now?

12. How will you make sure our own people thoroughly understand your system?
Do you have educational centers near us, or will we have to travel all the way across the country to find one? Will you be there to help during installation and after?

13. How many of your people specialize in software for my industry?
How many accountants work for you? Human resource specialists? Manufacturing experts?

14. Do your systems have built-in features that make them easier to use?
What happens if someone needs help figuring out a feature? Do you have online documentation that's easy to understand?

15. As my business changes will your system be flexible enough to change with it?
Or will we have to pay a lot to revamp it? Or even regenerate it?

These questions will help you when you sit down with individual software companies.

They're tough questions. Relevant ones. And any supplier who is worth his salt should be able to answer them without backpeddling.

Ask MSA

We'll answer all these questions to your satisfaction—plus any others you have.

In fact, we're probably the best equipped to answer them. Because MSA is *the* software company. We offer the most complete line of totally integrated systems in the software industry, including financial, human resource and manufacturing.

So you avoid the headache of trying to tie together individual systems. (And the even bigger headache of adding to them.)

We've planned our growth, and the growth of our products. Instead of acquiring systems piecemeal, then trying to integrate them, MSA develops each system to work with the others.

With MSA's integrated systems, there's no unnecessary duplication of data or effort. Reporting is faster. All your information is more timely and accurate—and in the form you choose.

In short, we do everything we can to help you make informed business decisions.

Our technical edge comes from experience

Staying ahead is easier for a company that's steeped in software technology. MSA has spent years developing, refining, testing and enhancing our systems.

This year alone, we'll invest $25 million to make sure all our systems are technologically razor sharp. That gives us a decided advantage over flash-in-the-pan technology that may not have the bug-free logic of a more experienced system.

It also gives you a decided advantage over "custom" systems you have to update yourself.

MSA relieves you of that time-consuming burden. We update and enhance your software for a full year. Then we continue this service for a surprisingly low annual fee.

Maintenance includes keeping your system up-to-date technologically. Enhancing it with new features that make it work even harder for you. And making sure it reflects changes in accounting procedures and government regulations, including 401(k), TEFRA, and FAS52.

If we can do all this, you can be sure MSA's software is flexible enough to accommodate changes in your business. You won't have to unexpectedly invest in customizing or completely regenerating your systems when you expand or reorganize.

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35,000 days of customer training

We make sure your people have a firm grasp of our systems. Last year alone, MSA conducted more than 35,000 student days of customer training for over 1,800 companies. At education centers all over the world, as well as at our headquarters.

From training sessions to cassettes to complete, easy-to-understand documentation, MSA provides the most extensive Customer Education Programs in the industry.

We even do a follow-up audit after installation to make sure you're getting the most from our system.

MSA not only enhances software, we enhance the people who use it. Regular user meetings give our customers a forum to express their likes, dislikes and suggestions. These often lead to new product developments.

Our systems are always ready to HELP

MSA systems are just as friendly as our people. Our online HELP feature actually guides users through our systems. And EASY-SCREEN™ lets them design their own screens without creating data processing nightmares.

If there's ever a question or problem with our systems, MSA customers are always close to service. Our Account Managers are knowledgeable, responsive, and backed by a complete team of industry specialists.

This team is responsible for solving the specific software needs of your industry. So you'll never get a blank look or an answer that doesn't relate to your business.

The heart of our integrated systems

It's MSA's General Ledger System. Combined with Accounts Payable/Purchase Order Control and our other systems, it gives you complete control over your financial information.

Over 800 accountants, financial experts and programming specialists work together to make MSA's financial systems the most advanced and most highly integrated in the industry.

MSA has the answers

Whatever your size—whatever your business—MSA has a total software solution.

We'll provide the highest quality integrated online software, including the systems listed at the right.

We'll tie your business and manufacturing software systems together, using our exclusive Extended Closed Loop™ manufacturing system.

We'll provide business software for your microcomputers, through our Peachtree Software Company.

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10. Payroll
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12. ALLTAX™ Taxing System
13. ALLTAX Reporter™
14. Manufacturing Control System (MRP II)
15. Executive Peachpak™
16. Peachtree Software™ business systems for microcomputers
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Mainframe Type/Model _____

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Title _____

Company _____

Address _____

City _____

State _____ Zip _____

Business Phone (____) _____

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PLUG COMPATIBILITY

Users evaluate personal computer products in several areas including performance, functionality, quality and price.

As in other sectors of the information industry, in order to capitalize on an established user preference, some vendors are making personal computers which are functionally identical to those of their competitors. Such products are termed "plug-compatible", a term borrowed from the mainframe industry in which one vendor's computer could be "unplugged" from the rest of the system and replaced by an identical product from another vendor. Being plug-compatible means that application software developed by (or for) one vendor would also work on another vendor's plug-compatible product. This enables vendors to enter the personal computer market without having to undergo the expense of developing software, or create a following of users who would develop software for its product. In short, plug-compatibility is a sure-fire strategy for market acceptance.

One of the earliest plug-compatible personal computer vendors was Franklin Computer, with its Apple-compatible ACE system. While not viewed as particularly innovative, the ACE product did achieve an almost immediate market acceptance by being able to run the extensive software available for Apples. Thus, instead of having to call attention to its product's features Franklin could boast a large existing software library a hardware priced below the equiv lent Apple personal computer.

With IBM having more than 20% the personal computer market, plu compatible competitors are alrea flocking to the fray. The first to appe is the Compaq personal comput which boasts the ability of being ab to run all of the IBM available so ware. The fact that the Compaq also a cleverly packaged portab system (similar in size to the Osborr adds another attractive feature b sides IBM compatibility. By the e of 1983, we will likely see seve more IBM-compatible personal co puters as IBM's market share co tinues to attract competitors.

Jon Fra

Vendor Positioning

Vendors likely to exceed $100,000,000 in revenues by 1985 *Source Gartner Group*

	Direct Sales	Mass Merchandising	Retail	Mfr. Stores	Office Dealers	Distributors	System Houses	Mfg. OEMs	Other OEMs	Large Business	Small Business	Consumer	Education	Industrial	Scientific	Portable	Plug-Compatible
ALTOS						X	X	X	X		X			X			
APPLE	X		X		X		X			X	X	X	X			X	
ATARI		X										X	X				
COMMODORE		X	X		X		X				X	X	X			X	
COMPAQ			X					X		X	X						X
CONVERGENT	X						X		X	X	X						
DEC	X		X	X		X	X		X	X	X			X	X		
FORTUNE	X		X							X	X			X			
FRANKLIN			X			X					X	X					X
GRID	X		X							X	X					X	
HEWLETT-PACKARD	X		X				X		X	X	X			X	X	X	
IBM	X		X	X			X		X	X	X	X	X	X	X	X	
KAYPRO			X			X					X	X				X	
NEC					X	X					X						
OSBORNE			X			X					X	X				X	
SEIKO					X	X			X		X						
TANDY				X			X				X	X	X			X	
TELEVIDEO						X			X		X			X			
TEXAS INS.			X	X			X				X	X	X			X	
VICTOR		X	X								X						
WANG							X			X	X						
WICAT	X		X							X	X						
XEROX							X		X		X			X	X		

DISTRIBUTION EMPHASIS — MARKET EMPHASIS

ADVERTISEMENT

HERE'S THE PERSONAL COMPUTER AD OUR COMPETITION DOESN'T WANT YOU TO READ.

It's an ad for NEC's APC™ Advanced Personal Computer. A solutions-oriented system that solves business problems in the simplest, most cost-effective way. The APC supports both CP/M-86™ and MS-DOS.™ It can store more information than any system in its price range. In short, it's got the best price/performance of any personal computer. That's why our competition would p[illegible]at you never see our syst[illegible]

We asked som[illegible] busi-men who s[illegible]ystems us why t[illegible]ed us reason[illegible]rly un[illegible]s. The[illegible] APC [illegible] only p[illegible]mpute[illegible]arket [illegible]e pow[illegible]6-bit [illegible]ssor [illegible]disk [illegible]ity, [illegible]ion disp[illegible]mpr[illegible]pli-ca[illegible]. F[illegible]et, the A[illegible] these [illegible]d affo[illegible]e's w[illegible]y sa[illegible]uch [illegible]urs, [illegible]ther." [illegible]e sys-[illegible] good [illegible] couldn't [illegible]any that [illegible] well as [illegible]em that [illegible]s in the

"That APC of yours is th[illegible] most powerful computer of a[illegible]es I saw. I don't know hov[illegible] for that price."

"Now that I've used it f[illegible] awhile, I see why you name[illegible] *Advanced* Personal Computer."

And that from bu[illegible]ssmen who have tested t[illegible]etition! When you see the [illegible] you'll understand why, a[illegible]e others, all of these bu[illegible] picked NEC.

Our business software was optimized to take advantage of the APC's unique hardware features. That makes system operation faster and easier.

Our software includes a full set of general accounting packages, word processing, mailing list management, business planning, database management, and communications. And we're readying many more.

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Our high-resolution color graphics run circles, arcs and lines around everybody else. The A[illegible] screen images—line[illegible] characters p[illegible] are unprecedented in their clarity. [illegible]olors against resolution [illegible]petitive systems often must.

compar[illegible]he APC [illegible] for pla[illegible]alysis, dat[illegible]nager[illegible]ord proce[illegible]'s part[illegible]al commu[illegible]vork, [illegible]e the A[illegible]nal fo[illegible]ronic m[illegible]ces[illegible]mput[illegible]ieta[illegible]datab[illegible]ic an[illegible] A[illegible] 32[illegible]t a[illegible] proc[illegible] A un[illegible]n giv[illegible] a[illegible] Th[illegible] models. The mo[illegible] combines a[illegible] black high-res[illegible] 128K bytes of u[illegible] a 1-million-byte f[illegible] keyboard and ma[illegible] dard features yo[illegible] on competiti[illegible]

[illegible]mpetitive systems[illegible]

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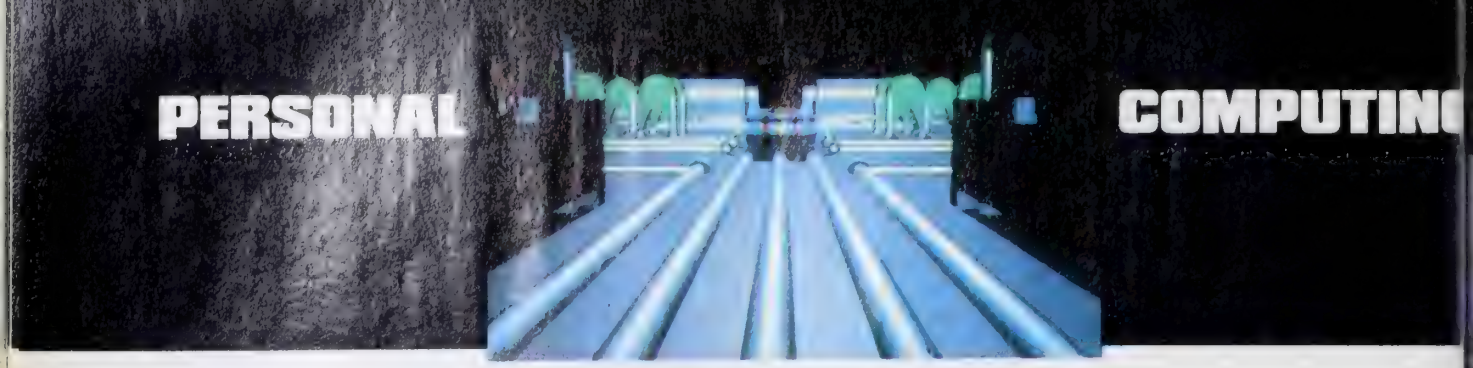
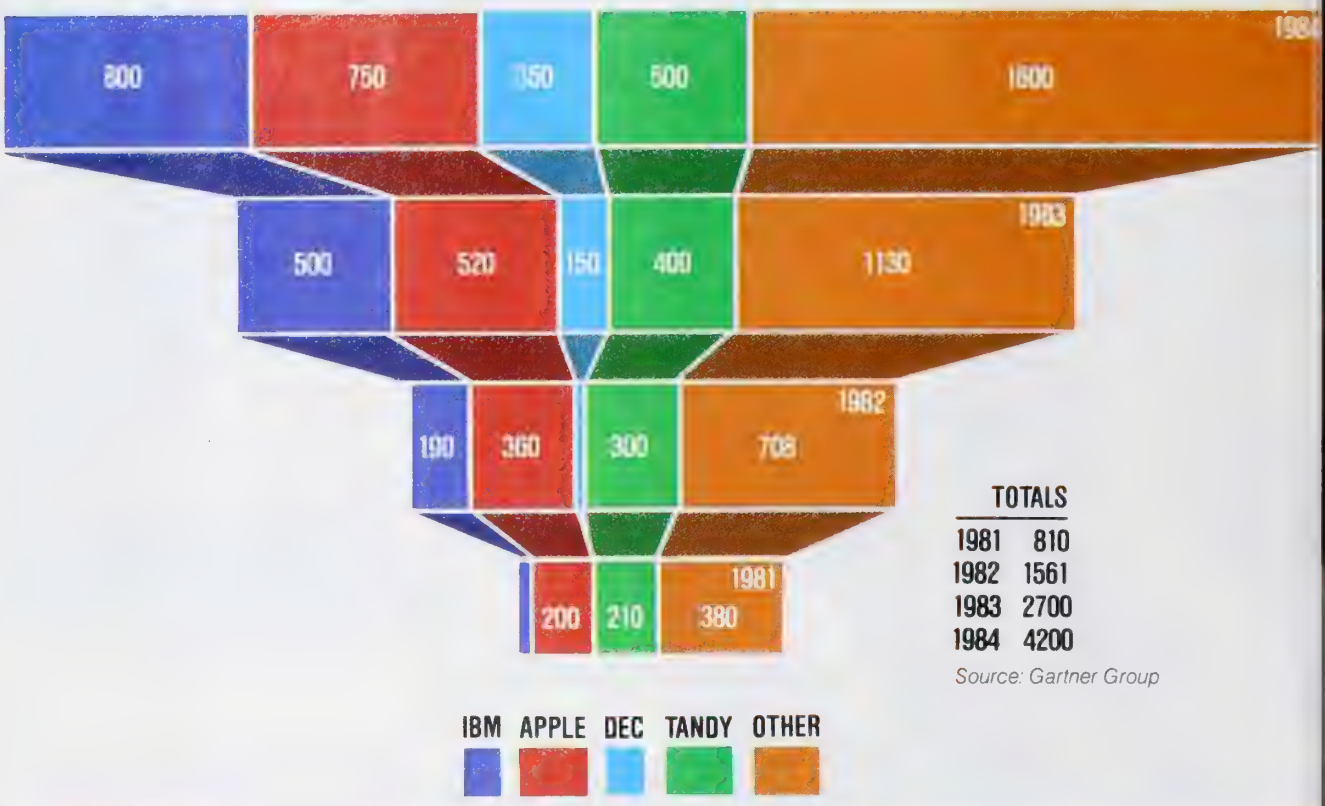


Personal Computer Shipment Projections
(Systems Sold Over $1000)
U.S. Vendors — Worldwide Markets In Units (000)
Last Update 3-26-83



TOTALS	
1981	810
1982	1561
1983	2700
1984	4200

Source: Gartner Group

A LOOK AT THE LEADERS

IBM

In "The Microcomputer Explosion" (Forbes, April 26, 1982) Gartner Group questioned whether IBM would be able to "adapt to the fundamentally different challenges posed by the mass market, with distribution requirements that vary considerably from IBM's historic mode of operations". Just a year later, there remains little doubt that IBM has answered that question in the affirmative, and resoundingly so. Proving it can move with surprising speed for a company its size, IBM substantially expanded its marketing capacities over the last year and is poised to become the leader in the personal computing market. With shipments expected to total at least 500,000 units for 1983 (up over 150% from 1982), it is only a question of time before IBM passes Apple Computer, the current industry leader.

As noted earlier, IBM's advantages in the large business market are difficult to overstate. Moreover, strategically placed distribution channels, including Computerlands and Sears Business Centers as well as its own Product Centers and a host of independent retailers and value-added resellers, will make it easier than ever before for small businesses to become acquainted with IBM. Finally, IBM's advertising investment has created such a high consumer awareness that the expected IBM home computer is virtually a guaranteed success.

Apple Computer

The recent introduction of the lon awaited Lisa computer is a tribute Apple Computer's commitment to r maining at the leading edge of comput technology, particularly with respect the user interface. Apple has a kee understanding that ease-of-use, the ha mark of Lisa, is one of the most pote forces driving the industry. Though Lisa $10,000 price tag seems high, it shou not be a significant impediment in reac ing targeted markets. Moreover, as vo ume production begins and competiti pressures arise, Lisa's price will com down. A key concern, however, whether less expensive integrated so ware solutions (Lisa's capabilities a

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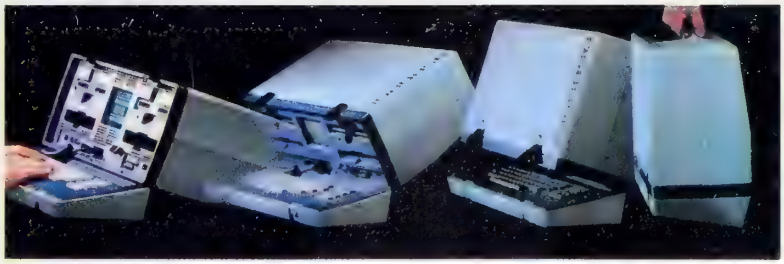

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So with a little talent, the Kaypro II, and its complete software package, you might find yourself moving up too. $1795.

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built into its hardware) from companies like VisiCorp will prove to be more viable alternatives.

Through 1983, Apple will be carried by its very successful Apple II and IIe models, both helped by recent price cuts. These products may become Apple's solution for the home market when they reach the appropriate price points and after it finds a replacement for their current markets. Apple is aggressively expanding its direct marketing efforts and becoming more vertically integrated.

Digital Equipment

Next to IBM, the vendor best positioned to win significant share of the large business market is DEC, due largely to its installed base, its marketing savvy, and its highly competitive product offerings. Although it followed IBM's PC introduction by nearly a year, DEC came out with three microcomputer lines, dubbed Rainbow 100 (entry level), the DECmate II (with strong word processing functions) and the Professional 300 (offering powerful multi-tasking capabilities). One of their key features is their very strong "system" capabilities (i.e., ease of integration into large user facilities) as well as their compatibility with DEC's popular line of VAX minicomputers and their substantial libraries of existing software.

While it should ship on the order of 100,000 total units this year, DEC has taken the steps to enable it to reach much higher volumes in following years (estimated 350,000 in 1984 and conceivably as many as 1,000,000 in 1987). Moreover, DEC has pursued a shotgun distribution approach, not unlike that of IBM, to position itself for growth in multiple markets.

Tandy

As noted earlier, Tandy's competitive edge lies in distribution and merchandising and it has leveraged those strengths to good advantage. Tandy's apparent strategy is to quickly seize high-growth market opportunities with products and/or technologies manufactured or developed by others. Its expanding activities in communications-related areas, from cordless telephones to pocket pagers, and in the exploding portable computer market, with its recently introduced Model 100, are evidence of this strategy. Tandy's personal computers, especially the Color Computer, remain popular products that should keep it one of the leaders in the small business market.

CONCLUSION

Whatever impacts personal computing has had to date on the ways we live and work, bear in mind that they are just the leading edge of a very powerful wave indeed. Though we may not be able to predict exactly how all these new capabilities will be integrated into our lives, there is no doubt that individuals who start familiarizing themselves and companies that begin the planning process will have much better chances for meaningful productivity gains and successful implementations. Those companies that continue to ignore these realities will pay a dear price, sooner or later.

"Personal Computing" was written by *Gartner Group Inc.* and edited by *Jack Karp. Gartner Group* Special Advertising Supplements for *Forbes Magaz* are produced under the direction *Kenneth A. Smalheiser.*

Measuring A Market Of Millions

One impact the microcomputer explosion has had on the industry is to completely confound traditional means of tracking, counting and measuring the pace of industry activity. The information industry has never been noted for having arrived at a consensus of how to measure its progress: a variety of services track different industry parts but each uses its own definitions as to how to group and segment products and whether to count shipments or installed bases - or whether it is a unit measurement or a dollar measurement that is m relevant.

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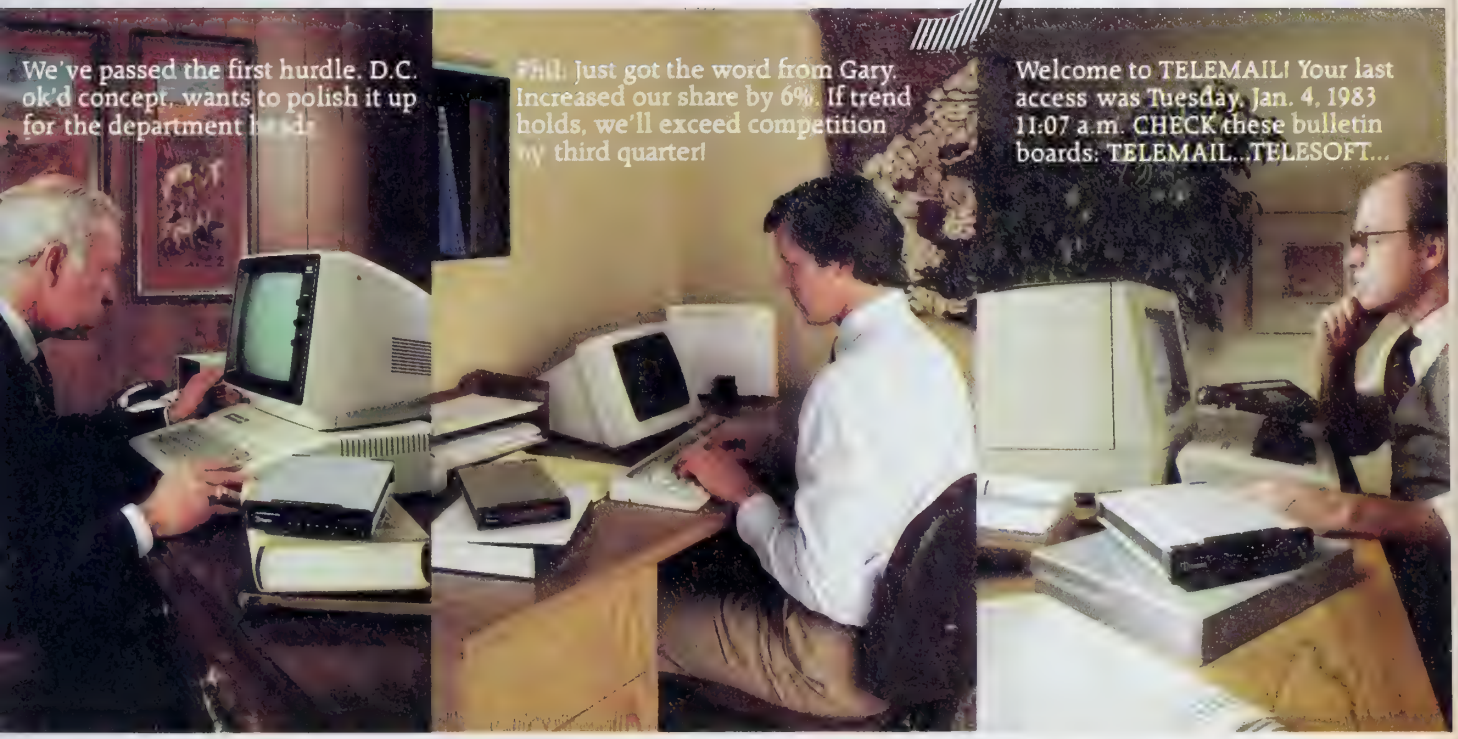

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Since 1980, executives have been able to get stock from their employers without consulting shareholders. Is the party over?

Bursting a pretty balloon

By Jill Bettner

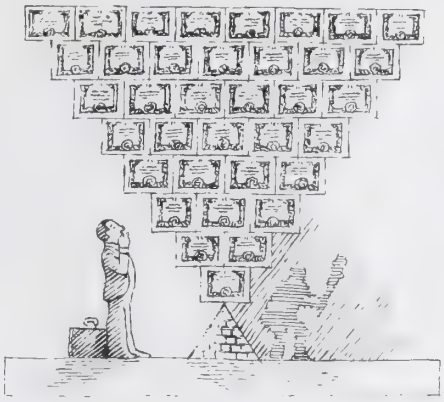
OH, THE IRONY of it all. Wall Street is hitting new highs, tempting corporate officers and directors to exercise fistfuls of low-priced stock options. But just when the profits look irresistible, along comes a nasty federal judge to spoil the party.

First, a little background. In 1980 the Securities & Exchange Commission amended insider trading rules to allow individuals to exercise options using stock instead of cash. Corporate executives, who typically get more options than anybody else, were overjoyed. In the past, they often had to borrow money to finance these transactions. But the new regulation allowed them, in effect, to sell stock one day and buy the next—something that would normally require a six-month waiting period.

There's more. Under the 1980 amendments, the corporation didn't even have to ask shareholders for permission when insiders exchanged stock plus options for stock. That avoids all those sticky questions at annual meetings about undue enrichment of officers.

Clever insiders, however, quickly saw the potential for a neat pyramiding game. A few shares of old stock can quickly be turned into hundreds or even thousands of new ones. Here's how: If an executive has options for 1,000 shares at $10 a share, he ordinarily has to come up with $10,000 to exercise. But suppose he's allowed to trade stock directly for stock, and he happens to own 500 shares with a current market value of $20. He can hand the company those 500 shares plus the options entitling him to buy at $10 a share and get back 1,000 shares.

Then, still exercising options, he can trade in the 1,000 shares with a value of $20,000 for 2,000 shares with a value of $40,000. As long as the options hold out, he can keep doubling and redoubling. No real money comes into the corporate treasury, but a man with enough options can make a nice dollar without going into hock to finance his purchases.



That not only keeps money in the executive's pocket, it also postpones capital gains on the old shares. The IRS makes an individual who exercises options pay up when he sells his new shares, not when he makes a profit by exercising options. No wonder that over the past three years an estimated 80% of all public companies have added the stock-for-stock feature to their compensation plans. It's a simple matter when you don't need shareholders' approval.

Now, however, a U.S. district court in Connecticut has ruled that the SEC is all wet. Judge T. Emmet Clarie said that stockholders should be consulted before insiders are permitted to accumulate all those new shares without contributing much, if any, new working capital to a corporation. His opinion was issued in a derivative suit filed against several United Technologies executives, including one who pyramided 100 shares into 5,271 shares, netting $320,500.

A single lower court opinion, of course, doesn't overrule the SEC. But the United Technologies case, decided Feb. 9, is making option-rich executives nervous. The timing could hardly be worse, either. Aside from the fact that stock prices are rising, most proxy statements have already gone out. So corporations that want to seek shareholder approval will have to wait until next year. Meanwhile, insiders who exercise options with stock potentially face legal liability. Even cash exercises are questionable if the stock swaps have not been okayed by shareholders.

Where does the SEC stand? It expects to offer some guidance within the next few months. One proposed solution: Allow corporations to obtain shareholder approval retroactively for exercises occurring after Feb. 9. In the meantime, Judge Clarie's opinion is clearly a "bombshell," according to San Francisco securities lawyer Jesse Brill. Insiders should beware of shrapnel.

Jumping ship

Congress, you might remember, passed the Multiemployer Pension Plan Amendment Act in 1980 to protect workers in industries like trucking and mining, where employers typically pool their retirement contributions. The measure required employers who dropped out of plans with unfunded liabilities to pay withdrawal penalties equal to their share of the unfunded amount.

The idea, of course, was to protect workers from being left without adequate pension benefits. The penalty payments weren't just triggered by dropping out of a pension plan either. A company could find itself suddenly in debt to a multiemployer plan, for example, if it was taken over, or if it closed down a major facility.

Unfortunately, the threat of such withdrawal liabilities isn't working the way Congress intended. The potential of facing liability payments is keeping many firms from joining multiemployer plans *(see* FORBES, *Mar. 2, 1981)*.

But that is just the beginning. Not only are new companies staying away

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5134        **********
5135        * PROCESS HANDOFF PRIORITY
5136        **********
5137
5138      CALL SOMHHNDPRI (,,S_EXC_MSG
HND_PRI     EQU     $
            LD      DE,(S_EXC_MSGDAT)
            LD      HL,(S_EXC_ORGPRT)
            CALL    SOMHHNDPRI
5139      GO TO T_RETURN
            JP      T_RETURN
5140
5141    T_HND_REQ:
5142
5143        **********
5144        * PROCESS HANDOFF REQUEST (
5145        **********
5146
5147      CALL SOMHHNDREQ (,,S_EXC_MSG
HND_REQ     EQU     $
            LD      DE,(S_EXC_MSGDAT)
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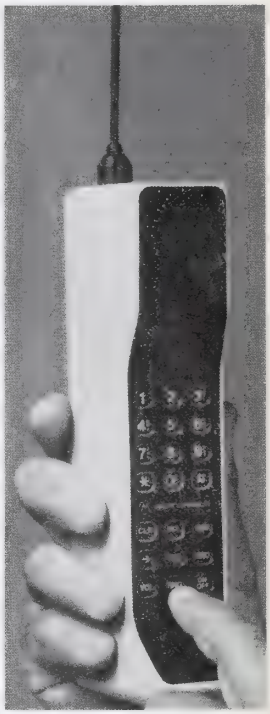

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from multiemployer plans, employers already signed up may be preparing to jump ship. "We're getting a lot of calls about that," says John Flittie, national director of actuarial services for Touche Ross. "Companies want to know if they should get out of this critter before their liability gets any worse."

No careful chief executive will talk openly about the problem—visions of abandoned pensioners, after all, don't generally make for good employee relations. But pension lawyers do say that many of their clients want to negotiate out of union-backed multiemployer plans and set up their own pension funds. "Those employers for whom exiting is an affordable alternative will be doing just that," says Steven Sacher, a partner with the Washington firm of Pepper, Hamilton & Scheetz. "There's a feeling that the only sure way to control your own destiny is to get out."

Funny, this wasn't exactly what Congress had in mind.—**Jane Sasseen**

Taxing Matters

Long after the victory parties have been forgotten, successful corporate takeover artists may wake up to a surprise hangover—courtesy of the IRS.

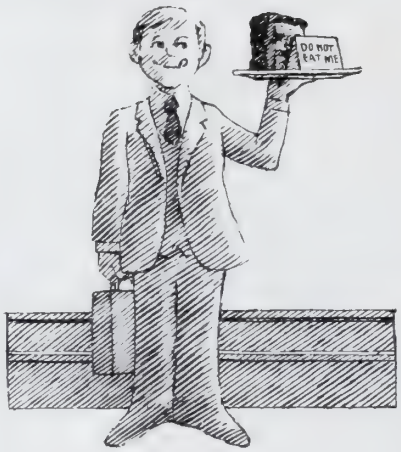
Ghosts of acquisitions past

By Ellyn Spragins

NOBODY EVER DENIED that takeovers like U.S. Steel's merger with Marathon Oil or Occidental Petroleum's gobbling up of Cities Service are expensive. But a recent Supreme Court opinion could make some of these giant acquisitions far pricier than stockholders or corporate officers ever expected. The decision sides squarely with the IRS on the tax benefit rule—an issue that has divided appellate courts for years, and could cost several corporations millions in additional taxes.

The concept of the tax benefit rule goes something like this: Suppose you donated land to an orphanage in 1981. Naturally, you deducted the value of that land on your tax return. But then the orphanage couldn't use the land and returned it to you in 1982. The IRS says that since you have the land back, you must count the amount you deducted in 1981 as income in 1982. No more tax break.

Moving this rather basic logic another step, the IRS argues that if an acquiring company takes writeoffs on certain acquired short-term assets that have already been written off, it has to give back the first writeoff. If you think that no company would actually do that, then you don't understand the underpinnings of the takeover game. Tax considerations



can make or break a deal.

When one company purchases another company using cash or notes instead of swapping stock, for example, it usually writes up the value of its new property's assets and then starts to expense them again. After all, the acquiring company pays a premium because it sees more value in its acquisition target than the balance sheet reveals. The bottom line: one asset, two tax savings.

Sadly, however, those days may soon be over. The IRS has been trying to stop this so-called double dipping for years, and the Supreme Court has just lent authority to the service's argument. "We could look at any transaction and apply the tax benefit rule to it," says one high-ranking IRS source who requested anonymity. "I can't give you a number because I have no statistics, but it will affect everyone that has stepped up the value of the assets they bought." Since company books are open to the IRS for three years and often longer, even old transactions will be subject to scrutiny.

"There have been almost no major acquisitions for cash or notes in the last several years in which the companies don't have some exposure to the IRS," says Robert Willens, Peat Marwick Mitchell's widely respected tax partner. "If a corporate taxpayer took an aggressive position—and there is no doubt that many did—they don't have any argument to make anymore. The IRS' rule applies."

Particularly vulnerable are companies that paid a premium for intangible assets such as patents or acquired large quantities of short-lived assets such as tools and supplies.These are items that often have little value on an acquired company's books, though they often contribute a great deal to the worth of an acquisition. "If an acquiring company put a value on a patent, the government may now say, 'Well, you will have to pay taxes on the R&D expense that went into that patent,' " explains Richard Berkowitz, a tax partner in Arthur Andersen's mergers and acquisitions group.

Take a look at the potential impact on a company like Warner-Lambert, which bought IMED, a designer of electronic medical instruments, for $468 million last August. IMED had expensed over $4 million in research and development costs during 1982 alone. If Warner elected to write up the value of assets associated with IMED's research, it could suddenly wind up owing the IRS taxes on at least that amount.

Naturally, much of the potential liability here still depends on how aggressively the IRS takes advantage of its newfound clout. But companies that have rejoiced over winning nasty takeover battles in the last several years have good reason to worry. Their success may become a lot more expensive. And for companies interested in takeovers of the future, acquisition costs have just gone up. ■

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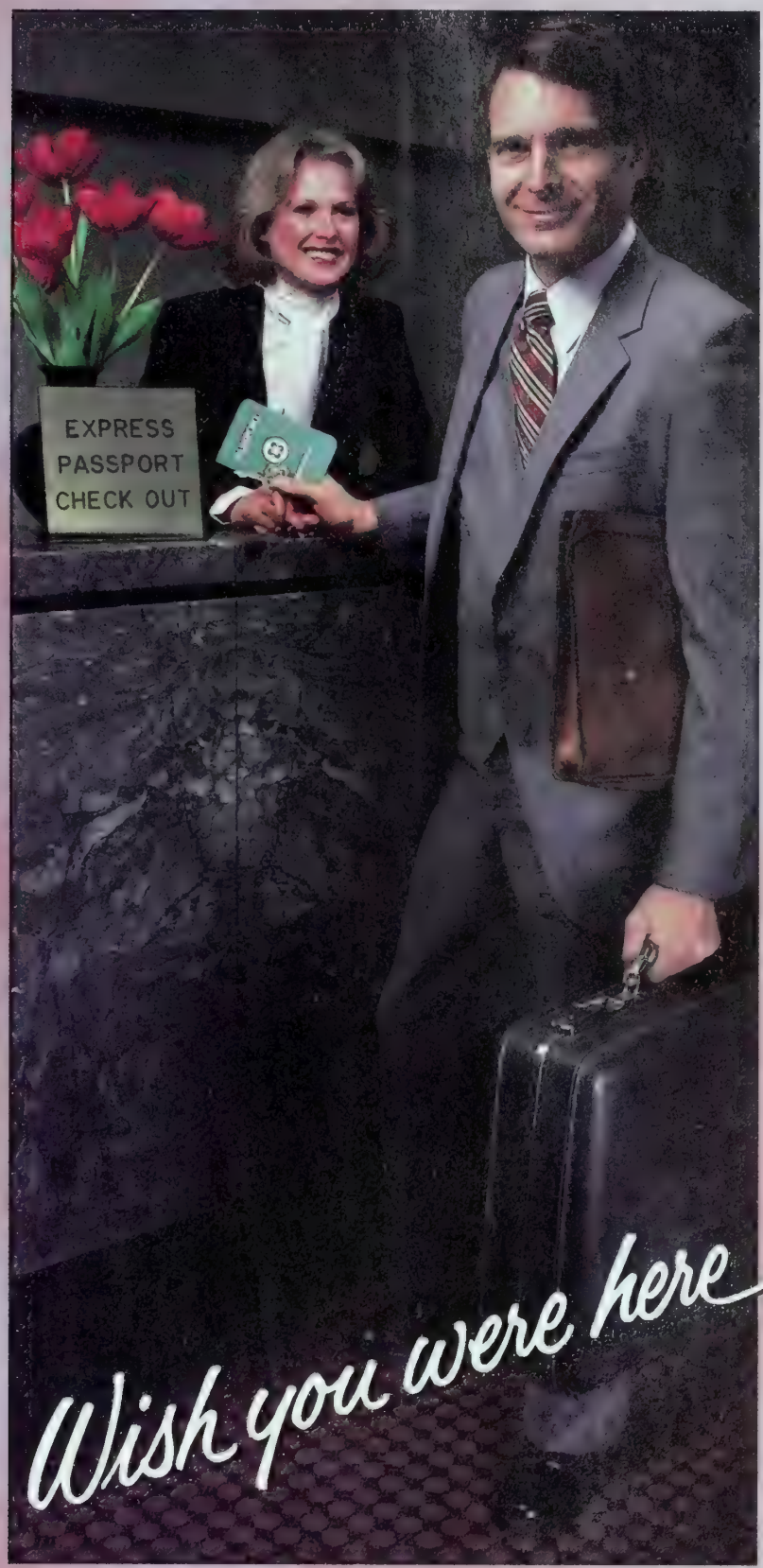

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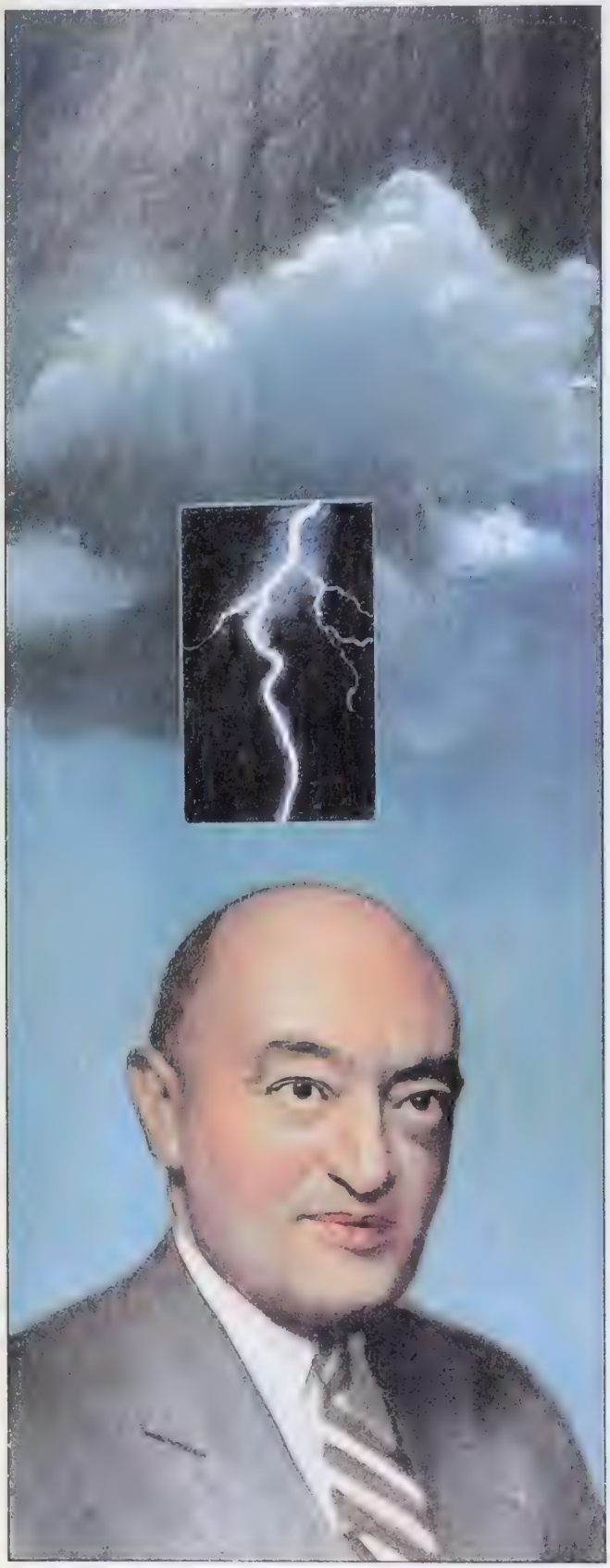


In which the author argues that our politicians and economists,

By Peter F. Drucker

THE TWO GREATEST economists of this century, Joseph A. Schumpeter and John Maynard Keynes, were born, only a few months apart, a hundred years ago: Schumpeter on Feb. 8, 1883 in a provincial Austrian town, Keynes on June 5, 1883 in Cambridge, England. (And they died only four years apart—Schumpeter in Connecticut on Jan. 8, 1950, Keynes in southern England on Apr. 21, 1946.) The centenary of Keynes' birth is being celebrated with a host of books, articles, conferences and speeches. If the centenary of Schumpeter's birth were noticed at all, it would be in a small doctoral seminar. And yet it is becoming increasingly clear that it is Schumpeter who will shape the thinking and inform the questions on economic theory and economic policy for the rest of this century, if not for the next 30 or 50 years.

THE TWO MEN WERE NOT ANTAGONISTS. Both challenged long-standing assumptions. The opponents of Keynes were the very "Austrians" Schumpeter himself had broken away from as a student, the neoclassical economists of the Austrian School. And while Schumpeter considered all of Keynes' answers wrong, or at least misleading, he was a sympathetic critic. Indeed, it was Schumpeter who established Keynes in America. When Keynes' *General Theory* came out, Schumpeter, by then the senior member of the Harvard economics faculty, told his students to read the book and told them also that Keynes' work had totally superseded his own earlier writings on money.

Keynes, in turn, considered Schumpeter one of the few contemporary economists worthy of his respect. In his lectures he again and again referred to the works Schumpeter had published during World War I, and especially to Schumpeter's essay on the *Rechenpfennige* (i.e., money of account) as the initial stimulus for his own thoughts on money. Keynes' most successful policy initiative, the proposal that Britain and the U.S. finance World War II by taxes rather than by borrowing, came directly out of Schumpeter's 1918 warning of the disastrous consequences of the debt financing of World War I.

Schumpeter and Keynes are often contrasted politically, with Schumpeter being portrayed as the "conservative" and Keynes as the "radical." The opposite is more nearly right. Politically Keynes' views were quite similar to what we now call "neoconservative." His theory had its origins in his passionate attachment to the free market and in his desire to keep politicians and governments out of it. Schumpeter, by contrast, had serious doubts about the free market. He thought that an "intelligent monopoly"—the American Bell Telephone system, for instance—had a great deal to recommend itself. It could afford to take the long view instead of being driven from transaction to transaction by short-term expediency. His closest friend for many years was the most radical and most doctrinaire of Europe's left-wing socialists, the Austrian Otto Bauer, who, though staunchly anticommunist, was even more

AND KEYNES

sometimes unknowingly, are following the wrong prophet.

anticapitalist. And Schumpeter, while never even close to being a socialist himself, served during 1919 as minister of finance in Austria's only socialist government between the wars. Schumpeter always maintained that Marx had been dead wrong in every one of his answers. But he still considered himself a son of Marx and held him in greater esteem than any other economist. At least, so he argued, Marx asked the right questions—and to Schumpeter questions were always more important than answers.

The differences between Schumpeter and Keynes go much deeper than economic theorems or political views. The two saw a different economic reality, were concerned with different problems and defined "economics" quite differently. These differences are highly important to an understanding of today's economic world.

Keynes, for all that he broke with classical economics, operated entirely within its framework. He was a "heretic" rather than an "infidel." Economics, for Keynes, was the equilibrium economics of Ricardo's 1810 theories, which dominated the 19th century. This economics deals with a closed system and a static one. Keynes' key question was the same question the 19th-century economists had asked: "How can one maintain an economy in balance and stasis?"

For Keynes, the main problems of economics are the relationship between the "real economy" of goods and services and the "symbol economy" of money and credit; the relationship between individuals and businesses and the "macro-economy" of the nation-state; and finally, whether production (that is, supply) or consumption (that is, demand) provides the driving force of the economy. In this sense Keynes was in a direct line with Ricardo, John Stuart Mill, the "Austrians" and Alfred Marshall. However much they differed otherwise, most of these 19th-century economists, and that includes Marx, had given the same answers to these questions: The "real economy" controls, and money is only the "veil of things"; the micro-economy of individuals and businesses determines, and government can, at best, correct minor discrepancies and, at worst, create dislocations; and supply controls, with demand a function of it.

KEYNES ASKED the same questions that Ricardo, Mill, Marx, the "Austrians" and Marshall had asked but, with unprecedented audacity, turned every one of the answers upside down. In the Keynesian system, money and credit are "real," and goods and services dependent on, and shadows of, the "symbol economy"; the macro-economy, the economy of the nation-state, is everything, with individuals and firms having neither power to influence, let alone to direct, the economy nor the ability to make effective decisions counter to the forces of the "macro-economy"; and economic phenomena, capital formation, productivity and employment are functions of demand.

By now we know, as Schumpeter knew 50 years ago, that every one of these Keynesian answers is the wrong answer. At least they are valid only for special cases and

Schumpeter insisted that innovation is the very essence of economics and most certainly of a modern economy.

within fairly narrow ranges. Take, for instance, Keynes' key theorem: that monetary events—government deficits, interest rates, credit volume and volume of money in circulation—determine demand and with it economic conditions. This assumes—as Keynes himself stressed—that the turnover velocity of money is constant and not capable of being changed over the short term by individuals or firms. Schumpeter pointed out 50 years ago that all evidence negates this assumption. And indeed, whenever tried, Keynesian economic policies, whether in the original Keynesian or in the modified Friedman version, have been defeated by the "micro-economy" of businesses and individuals, unpredictably and without warning, changing the turnover velocity of money almost overnight.

When the Keynesian prescriptions were initially tried—in the U.S. in the early New Deal days—they seemed at first to work. But then, around 1935 or so, consumers and businesses suddenly sharply reduced the turnover velocity of money within a few short months, which aborted a recovery based on government deficit spending and brought about a second collapse of the stock market in 1937. The best example, however, is what happened in this country in the last few years. The Federal Reserve's purposeful attempt to control the economy by controlling money supply has largely been defeated by consumers and businesses who suddenly and almost violently shifted deposits from thrifts into money market funds and from long-term investments into liquid assets—that is, from low-velocity into high-velocity money—to the point where no one can really tell any more what the "money supply" is or even what the term means. Individuals and businesses seeking to optimize their self-interest and guided by their perception of economic reality will always find a way to beat the "system"—whether, as in the Soviet bloc, through converting the entire economy into one gigantic black market or, as in the U.S. in the last few years, through transforming the financial system overnight despite laws, regulations or economists.

This does not mean that economics is likely to return to pre-Keynesian neoclassicism. Keynes' critique of the neoclassic answers is as definitive as Schumpeter's critique of Keynes. But because we now know that individuals can and will defeat the system, we have lost the certainty that Keynes imposed on economics and that has made the Keynesian system the lodestar of economic theory and economic policy for 50 years. Both Friedman's monetarism and supply-side economics are desperate attempts to patch up the Keynesian system of equilibrium economics. But it is unlikely that either can restore the self-contained, self-confident equilibrium economics, let alone an economic theory or an economic policy in which one factor, whether government spending, interest rates, money supply or tax cuts, controls the economy predictably and with near-certainty.

That the Keynesian answers were not going to prove any more valid than the pre-Keynesian ones that they replaced was clear to Schumpeter from the beginning. But to him this was much less important than that the Keynesian questions—the questions of Keynes' predecessors as well—were not, Schumpeter thought, the important questions at all. To him the basic fallacy was the very assumption with which Keynes had started out: the assumption that the healthy, the "normal," economy is an economy in static equilibrium. Schumpeter, from his student days on, held that a modern economy is always in dynamic disequilibrium. Schumpeter's economy is not a closed system like Newton's universe—or Keynes' "macro-economy." It is forever growing and changing, and is biological rather than mechanistic in nature. If Keynes was a "heretic," Schumpeter was an "infidel."

Schumpeter was himself a student of the great men of Austrian economics and at a time when Vienna was the world capital of economic theory. He held his teachers in lifelong affection. But his doctoral dissertation—it became the earliest of his great books, *The Theory of Economic Development* (which in its original German version came out in 1911, when Schumpeter was only 28 years old)—starts out with the assertion that the central problem of economics is not equilibrium but structural change. This then led to Schumpeter's famous theorem of the innovator as the true subject of economics.

Classical economics considered innovation to be outside the system, as Keynes did, too. Innovation belonged in the category of "outside catastrophes" like earthquakes, climate or war, which, everybody knew, have profound influence on the economy but are not part of economics. Schumpeter insisted that, on the contrary, innovation—that is, entrepreneurship that moves resources from old and obsolescent to new and more productive employments—is the very essence of economics and most certainly of a modern economy.

He derived this notion, as he was the first to admit, from Marx. But he used it to disprove Marx. Schumpeter's *Economic Development* does what neither the classical economists nor Marx nor Keynes was able to do: It makes profit fulfill an economic function. In the economy of change and innovation, profit, in contrast to Marx, is not a *Mehrwert*, a "surplus value" stolen from the workers. On the contrary, it is the only source of jobs for workers and of labor income. The theory of economic development shows that no one except the innovator makes a genuine "profit," and the innovator's profit is always quite short-lived. But innovation in Schumpeter's famous phrase is also "creative destruction." It makes obsolete yesterday's capital equipment and capital investment. The more an economy progresses, the more capital formation will it therefore need. Thus what the classical economist—or the accoun-

tant or the stock exchange—considers "profit" is a genuine cost, the cost of staying in business, the cost of a future in which nothing is predictable except that today's profitable business will become tomorrow's white elephant. Thus, capital formation and productivity are needed to maintain the wealth-producing capacity of the economy and, above all, to maintain today's jobs and to create tomorrow's jobs.

SCHUMPETER'S "INNOVATOR" with his "creative destruction" is the only theory so far to explain why there is something we call "profit." The classical economists very well knew that their theory did not give any rationale for profit. Indeed, in the equilibrium economics of a closed economic system there is no place for profit, no justification for it, no explanation of it. If profit is, however, a genuine cost, and especially if profit is the only way to maintain jobs and to create new ones, then "capitalism" becomes again a moral system.

Morality and profits. The classical economists had pointed out that profit is needed as the incentive for the risk taker. But is this not really a bribe and thus impossible to justify morally? This dilemma had driven the most brilliant of 19th-century economists, John Stuart Mill, to embrace socialism in his later years. It had made it easy for Marx to fuse dispassionate analysis of the "system" with the moral revulsion of an Old Testament prophet against the "exploiters." The weakness on moral grounds of the profit incentive enabled Marx at once to condemn the "capitalist" as wicked and immoral, and assert "scientifically" that he serves no function and that his speedy demise is "inevitable." As soon, however, as one shifts from the axiom of an unchanging, self-contained, closed economy to Schumpeter's dynamic, growing, moving, changing economy, what is called "profit" is no longer immoral. It becomes a moral imperative. Indeed, the question then is no longer the question that agitated the classicists and still agitated Keynes: How can the economy be structured to minimize the bribe of the functionless surplus called "profit" that has to be handed over to the "capitalist" to keep the economy going? The question in Schumpeter's economics is always: Is there sufficient profit? Is there adequate capital formation to provide for the costs of the future, the costs of staying in business, the costs of "creative destruction"?

THIS ALONE makes Schumpeter's economic model the only one that can serve as the starting point for the economic policies we need. Clearly the Keynesian—or classicist—treatment of innovation as being "outside" and in fact peripheral to the economy and with minimum impact on it, can no longer be maintained (if it ever could be). The basic question of economic theory and economic policy, especially in highly developed countries, is clearly: How can capital formation and productivity be maintained so that rapid technological change as well as employment can be sustained? What is the minimum profit needed to defray the costs of the future? What is the minimum profit needed, above all, to maintain jobs and to create new ones?

Schumpeter gave no answer—he did not much believe in answers. But 70 years ago, as a very young man, he asked what is clearly going to be the central question of economic theory and economic policy in the years to come.

And then, during World War I, Schumpeter realized, long before anyone else—and a good ten years before Keynes did—that economic reality was changing. He realized that World War I had brought about the monetarization of the economies of all belligerents. Country after country, including his own still fairly backward Austria-Hungary, had succeeded during the war in mobilizing the entire liquid wealth of the community, partly through taxation, but mainly through borrowing. Money and credit, rather than goods and services, had become the "real economy."

In a brilliant essay published in a German economic journal in July 1918—when the world Schumpeter had grown up in and had known was crashing down around his ears—he argued that, from now on, money and credit would be the lever of control. What he argued was that neither supply of goods, as the classicists had argued, nor demand for goods, as some of the earlier dissenters had maintained, was going to be controlling anymore. Monetary factors—deficits, money, credit, taxes—were going to be the determinants of economic activity and of the allocation of resources.

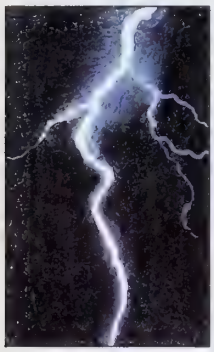
This is, of course, the same insight on which Keynes later built his *General Theory*. But Schumpeter's conclusions were radically different from those Keynes reached. Keynes came to the conclusion that the emergence of the "symbol economy" of money and credit made possible the "economist-king," the scientific economist, who, by playing on a few simple monetary keys—government spending, the interest rate, the volume of credit or the amount of money in circulation—would maintain permanent equilibrium with full employment, prosperity and stability. But Schumpeter's conclusion was that the emergence of the "symbol economy" as the dominant economy opened the door to tyranny and, in fact, invited tyranny. That the economist now proclaimed himself infallible, he considered pure hubris. But, above all, he saw that it was not going to be economists who would exercise the power, but politicians and generals.

And then, in the same year, just before World War I ended, Schumpeter published *The Tax State* ("The Fiscal State" would be a better translation). Again, the insight is the same Keynes reached 15 years later (and, as he often acknowledged, thanks to Schumpeter): The modern state, through the mechanisms of taxation and borrowing, has acquired the power to shift income and, through "transfer

He prophesied inflation would destroy democracy and capitalism. Inflation is now the central problem of free markets.

payments," to control the distribution of the national product. To Keynes this power was a magic wand to achieve both social justice and economic progress, and both economic stability and fiscal responsibility. To Schumpeter—perhaps because he, unlike Keynes, was a student of both Marx and history—this power was an invitation to political irresponsibility, because it eliminated all economic safeguards against inflation. In the past the inability of the state to tax more than a very small proportion of the gross national product, or to borrow more than a very small part of the country's wealth, had made inflation self-limiting. Now the only safeguard against inflation would be political, that is, self-discipline. And Schumpeter was not very sanguine about the politician's capacity for self-discipline.

Schumpeter's work as an economist after World War I is of great importance to economic theory. He became one of the fathers of business cycle theory.



BUT SCHUMPETER'S REAL contribution during the 32 years between the end of World War I and his death in 1950 was as a political economist. In 1942, when everyone was scared of a worldwide deflationary depression, Schumpeter published his best-known book, *Capitalism, Socialism and Democracy*, still, and deservedly, read widely. In this book he argued that capitalism would be destroyed by its own success. This would breed what we would now call the "new class": bureaucrats, intellectuals, professors, lawyers, journalists, all of them beneficiaries of capitalism's economic fruits and, in fact, parasitical on them, and yet all of them opposed to the ethos of wealth production, of saving and of allocating resources to economic productivity. The 40 years since this book appeared have surely proved Schumpeter to be a major prophet.

And then he proceeded to argue that capitalism would be destroyed by the very democracy it had helped create and made possible. For in a democracy, to be popular, government would increasingly become the "tax state," would increasingly shift income from producer to nonproducer, would increasingly move income from where it would be saved and become capital for tomorrow to where it would be consumed. Government in a democracy would thus be under increasing inflationary pressure. Eventually, he prophesied, inflation would destroy both democracy and capitalism.

When he wrote this in 1942, almost everybody laughed. Nothing seemed less likely than an inflation based on economic success. Now, 40 years later, this has emerged as the central problem of democracy and of a free-market economy alike, just as Schumpeter had prophesied.

The Keynesians in the Forties ushered in their "promised land," in which the economist-king would guarantee the perfect equilibrium of an eternally stable economy through control of money, credit, spending and taxes. Schumpeter, however, increasingly concerned himself with the question of how the public sector could be controlled and limited so as to maintain political freedom and an economy capable of performance, growth and change. When death overtook him at his desk, he was revising the presidential address he had given to the American Economic Association only a few days earlier. The last sentence he wrote was: "The stagnationists are wrong in their diagnosis of the reason the capitalist process should stagnate; they may still turn out to be right in their prognosis that it will stagnate—with sufficient help from the public sector."

Keynes' best-known saying is surely, "In the long run we are all dead." This is one of the most fatuous remarks ever made. Of course, in the long run we are all dead. But Keynes in a wiser moment remarked that the deeds of today's politicians are usually based on the theorems of long-dead economists. And it is a total fallacy that, as Keynes implies, optimizing the short term creates the right long-term future. Keynes is in large measure responsible for the extreme short-term focus of modern politics, of modern economics and modern business—the short-term focus that is now, with considerable justice, considered a major weakness of American policymakers, both in government and in business.

SCHUMPETER ALSO KNEW that policies have to fit the short term. He learned this lesson the hard way—as minister of finance in the newly formed Austrian republic in which he, totally unsuccessful, tried to stop inflation before it got out of hand. He knew that he had failed because his measures were not acceptable in the short term—the very measures that, two years later, a noneconomist, a politician and professor of moral theology did apply to stop the inflation, but only after it had all but destroyed Austria's economy and middle class.

But Schumpeter also knew that today's short-term measures have long-term impacts. They irrevocably make the future. Not to think through the futurity of short-term decisions and their impact long after "we are all dead" is irresponsible. It also leads to the wrong decisions. It is this constant emphasis in Schumpeter on thinking through the long-term consequences of the expedient, the popular, the clever and the brilliant, that makes him a great economist and the appropriate guide for today, when short-run, clever, brilliant economics—and short-run, clever, brilliant politics—have become bankrupt.

In some ways, Keynes and Schumpeter replayed the best-known confrontation of philosophers in the Western tradition—the Platonic dialog between Parmenides, the brilliant, clever, irresistible sophist, and the slow-moving and ugly, but wise, Socrates. No one in the interwar years was more brilliant, more clever than Keynes. Schumpeter, by contrast, appeared pedestrian—but he had wisdom. Cleverness carries the day. But wisdom endureth. ■

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A WAGNERIAN VISION

There is no place in Keynes' system for IBM, McDonald's hamburgers and venture capital. There is in Schumpeter's.

By James W. Michaels and Norman Gall

As a young man Joseph Alois Schumpeter proclaimed he had three wishes in life. To be the greatest lover in Vienna. To be the greatest horseman in Europe. And to be the greatest economist in the world. History records only spottily his achievements in the first two fields, but it is now quite clear that he did become the greatest economist of the 20th century. His vision was not narrowly economic but close to being prophetic about the whole direction in which society has been moving.

Schumpeter is not easy to read, but he did have a wry sense of humor. He wrote that Marx' ideas had a good chance of prevailing, not because they were correct, but in good measure because they appealed to the unsuccessful, who were, by definition, the most numerous. Such flashes of ironic humor and his own colorful personality notwithstanding, Schumpeter was not the popular essayist Keynes was. Nor were his ideas what the press, the public and the politicians wanted to hear.

He believed that full employment and economic stability were unhealthy and unwise goals. That the recessionary phase of the business cycle and its attendant suffering in temporary joblessness and numerous bankruptcies were therapeutic for preserving economic efficiency and inflation-free growth. That the welfare state would lead to a society bereft of vitality.

He believed that economic vitality came essentially from entrepreneurs, who, applying technology and innovation to a society, produced efficiencies that earned the entrepreneurs large profits. The innovation could be technological, à la IBM. Or it could be a single rearrangement of existing resources, à la McDonald's. In either case the profit was the fruit of this innovation rather than something stolen from the workers. Moreover, most of these profits would be reinvested in economic growth. Thus—as Peter Drucker points out in the preceding article—profits and economic inequality were not immoral. In fact, they were the engine of a better life for everyone. The government that uses its taxing powers to redistribute income, to deprive the entrepreneur of his reward, is thwarting this creative process.

An affectionate caricature of Schumpeter in 1919, when he was Austria's Minister of Finance. He was later to write: "Of all the reasons for the failure of able men, the most important is the inability to wait."

In Schumpeter, profits and savings are central. Without them there can be neither growth nor progress. Schumpeter faulted Keynes for denigrating the importance of savings. In this we now know that Schumpeter was correct. We are currently paying the price in slowed growth for decades of neo-Keynesian policies that penalized savings and encouraged, even subsidized, consumption.

There is much more in Schumpeter. Like Marx he felt that capitalism was doomed, but for totally different reasons. Where Marx thought capitalism would be killed by its excesses, Schumpeter thought its very successes would do the job. By its great productivity capitalism would make possible the redistributive state, which would end by taxing productive industry near to death. By its great productivity capitalism would create what we now call the "new class"—intellectuals, professors, bureaucrats, journalists—who would help bring it down. Schumpeter thought such thoughts before they were fashionable. Perhaps because his was not a cheerful message it made few converts. But that was before the world learned about stagflation bred by neo-Keynesian policies.

Fittingly for a child of turn-of-the-century Viennese culture, there was something Wagnerian about Schumpeter. He was a romantic in his thinking as in his life. The same young man who craved beautiful women and beautiful horses once reportedly fought a duel with a librarian over his students' right to use books. Unlike Keynes, Schumpeter was not in love with order but with dynamism. Keynes sought economic equilibrium; Schumpeter believed in economic growth.

"We are all Keynesians now," Richard Nixon proclaimed a decade or so ago. But the tide is swinging slowly away from what passes today as Keynes' ideas and toward the kind of thinking Schumpeter espoused. Quietly, a Schumpeterian revival is under way. It remains to be seen whether his warnings will be heeded soon enough to save capitalism and democracy from being destroyed by their own success.

Schumpeter—in his own words

The real tragedy is not unemployment per se, but unemployment plus the impossibility of providing adequately for the unemployed without impairing the conditions of further economic development.
Capitalism, Socialism and Democracy (1942)

The spirit of a people, its cultural level, its social structure, the deeds its policy may prepare [are] written in its fiscal history, stripped of all phrases. He who knows how to listen to its message here discerns the thunder of world history more clearly than anywhere else.
The Tax State (1918)

The capitalist achievement does not typically consist in providing more silk stockings for queens but in bringing them within reach of factory girls in return for steadily decreasing amounts of effort.
Capitalism, Socialism and Democracy

Capitalism is that form of private property economy in which innovations are carried out by means of borrowed money, which in general, though not by logical necessity, implies credit creation.
Business Cycles (1939)

Schumpeter with members of an economics seminar he gave at the University of Bonn in 1931.
The participants: (1) Sudhir Sen, (2) H. Wilhelms, (3) August Lösch, (4) Herbert Zassenhaus, (5) Wolfgang Stolper, (6) Martin Wiebel, (7) Hans Singer, (8) H. Spott, (9) Theodor Wessels, (10) Christa Hasenclever, (11) H. Kuschmann, (12) H. Schmitz, (13) Schumpeter, (14) Erich Schneider, (15) Karl Bode, (16) unidentified, (17) Günther Harkort.

Schumpeter—in his own words

. . . from all imaginable standpoints, the standpoint of irresponsible revolutionaries alone excepted, it is of prime importance after a war so to adjust a country's economic process as to stop it from producing further inflation. But it is clear at the same time that this is an extremely difficult thing to do in a world where everyone is afraid of the short-run consequences of such a policy.
Capitalism, Socialism and Democracy

Imposition of tariffs will act similarly to cheap money policy: It creates margins which would not otherwise exist and therefore calls forth enterprise and secondary expansion that may be a source of troubles.
Business Cycles

In capitalist reality as distinguished from its textbook picture, it is not [static] competition which counts but the competition from the new commodity, the new technology, the new source of supply, the new type of organization—competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their very lives. . . . This process of Creative Destruction is the essential fact about capitalism. It is what capitalism consists in and what every capitalist concern has got to live in.
Capitalism, Socialism and Democracy

. . . Marx, stripped of phrases, admits of interpretation in a conservative sense. . . .
Capitalism, Socialism and Democracy

Any cure [for inflation] will inevitably produce what is more unpopular still, a temporary depression, because so soon as inflation ceases, there will be readjustments in prices and production that will mean losses and unemployment, though neither need be serious. Everyone feels this and is afraid of it, especially in an election year. So inflation runs on by common consent.
"There Is Still Time to Stop Inflation," Nation's Business, June 1948

As every true prophet styles himself the humble mouthpiece of his deity, so Marx pretended no more than to speak the logic of the dialectic process of history. There is dignity in all this which compensates for many pettinesses and vulgarities with which, in his work and in his life, this dignity formed so strange an alliance.
Capitalism, Socialism and Democracy

As with Marx, it is possible to admire Keynes even though one may consider his social vision to be wrong and every one of his propositions to be misleading.
Ten Great Economists

In the U.S. alone there need not lurk, behind modern programs of social betterment, that fundamental dilemma that everywhere else paralyzes the will of every responsible man, the dilemma between economic progress and immediate increase of the real income of the masses.
Capitalism, Socialism and Democracy

. . . capitalism is as old as the phenomenon of credit creation; that is to say it goes back to around the Mediterranean in the 13th century.
Unpublished document, courtesy Professor Loring Allen

Schumpeter in 1932, at a party in his honor in Bonn prior to his departure to teach at Harvard. The guests wore daisies in their lapels. They were, in effect, their tickets of admission—a device for doing without printed invitations, which were subject to a government tax in Germany.

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Anchor Hocking wasn't making much money, despite $900 million in sales. That didn't make sense to ex-salesman Ray Topper. So he sold off a third of the company.

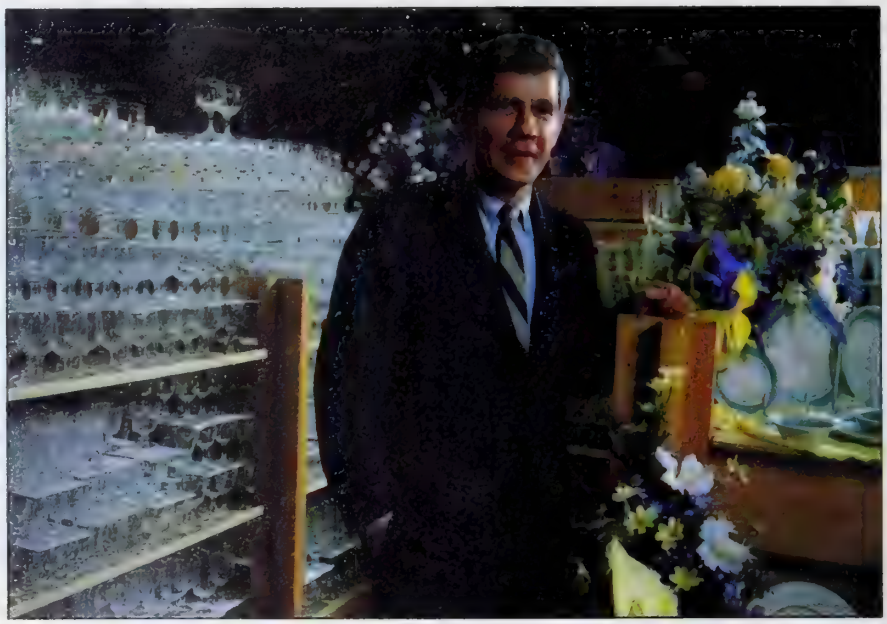
"We couldn't afford excellence"

By Paul B. Brown

IN TALKING FINANCE, J. Ray Topper, chief executive officer of Anchor Hocking, fills Central Casting's idea of the chairman of a middle America (Lancaster, Ohio) industrial corporation. Big and slow-talking, Topper, 55, tells you to the penny how much the exercise of outstanding stock options would have diluted first-quarter earnings (13 cents), how much Anchor Hocking's experimental retail giftware store sold last year ($1.82 million) and what it would take to make a success of a new $55 million glass plant (sales of $50 million with a return on investment of between 14% and 15%).

But then ask about the 4,000 products, ranging from Snoopy piggy banks to microwave cookware and bathroom fixtures, in Anchor's line, and you get a different kind of response. Topper moves to a display table in the boardroom and grabs an intricate soap dish. " Look at this," he says. "Hell, we can make these things all day for $1.50, and two-thirds of America will put them on their display shelves. Or how about this," he says, reaching for a carafe that retails for $1.89. "This and a $3 bottle of jug wine, and you're living."

In his 11 years at Anchor before rising to chief executive officer last spring, Topper spent plenty of time on the selling side, and it shows. For 19 years before that, he worked at General Electric, spending his last few years in the appliance marketing division. Now Anchor will need all the sales enthusiasm that Topper can instill in it. The company is selling its industrial glass container division, which generated more than a third of Anchor's $903 million in sales last year. Once the division is sold, Anchor will compete primarily in the consumer market.



Anchor Hocking chief, J. Ray Topper
From Snoopy piggy banks to microwave cookware.

That was inevitable, Topper says. "Seven years ago this company set a goal of achieving 16% return on shareholders' equity, which is the average return in all industries, and we just haven't done it," he says. Anchor's average return for the last seven years: 11%. It was stuck in packaging manufacture, which has been a loser for the company and competitors, too.

Topper probably is correct. No technology breakthrough promises to turn glass packaging into a high-return industry. Costs won't come down, and prices won't go up much, because of competition. Anchor was entrenched in four areas: glass packaging, other packaging, household products and hardware, and, says Topper, "We could not afford excellence in all four of them. We could have taken on $75 million in debt to try to do the job right, but I thought that would cripple us. The alternative was eliminating one division or putting all four on three-quarter rations, and I didn't want to do that."

So Anchor sold the container division for $68 million to Wesray Corp., headed by former Treasury Secretary William Simon (FORBES, *Feb. 28*). The price tag was $22 million under book. "I don't think we could have gotten much more," Topper says.

Including administrative costs, that sale led to a $30 million first-quarter writeoff—more than twice 1982 earnings. But at least the albatross is gone. The container division was returning just 7% on equity, and now it has given Anchor $55 million in cash.

Because Anchor usually sells for only two-thirds of book anyway, its cash makes the company especially vulnerable to takeover. Anchor last summer had to ransom itself from raider Carl Icahn by buying back his 6% holdings at a 35% premium. But the company won't, as Topper emphasizes, make some "silly-ass acquisition" to dispose of cash and discourage a takeover.

Instead, it plans to buy more of Towle Manufacturing, the Boston tableware maker. Anchor already owns 17% and, by buying at least 3% more, can consolidate 20% of Towle's earnings with Anchor's. It will start importing household items to supplement its line. And one way or another, it will expand its own petty retailing, now consisting of a single store down the street from company headquarters. That store last year produced net of 21% on a piddling $1.8 million in sales.

A real difficulty exists, however. Anchor is reluctant to compete directly with big customers such as K mart and Woolco. Most Anchor glass pieces retail for less than $10, as do its retail customers' products. "I plan to open only two or three stores this year," Topper says, conceding that sensitivity to customers is one reason for going small and slow. "Basically," he says, "we will be opening stores to serve pockets of our own employees not near a retail outlet, and to learn more about what sells."

Which implies that Anchor eventually will use what it learns. Topper talks hypothetically about the company's ability to open perhaps 150 stores. Maybe those stores aren't so hypothetical after all. ■

Wherein Stanley Goldman takes his company into Chapter 11, gets rid of its debt and keeps stock worth $6 million.

Nice work if you can get it

By Barbara Ettorre and Paul Bornstein

LESS THAN THREE years after emerging from bankruptcy proceedings, Eagle Clothes has regained its financial health and is planning to sell 1.5 million shares to the public. It's an intriguing story. Under Chief Executive Officer Stanley Goldman, 59, Eagle had flown right to the brink. In the late 1970s, burdened with debt, the menswear maker and retailer went to federal court in New York to get protection from its creditors under Chapter 11 of the Bankruptcy Act. It reorganized in 1980, having rid itself of $17.7 million of claims against it. But Eagle was still losing money—$1.6 million from operations, on sales of $7.5 million, in 1980, and $2.8 million from operations, on sales of $6.2 million, in 1981.

Enter, in October 1981, April Marcus Inc., a privately held apparel merchandiser, store liquidator and retailing consultant. April Marcus specializes in the volume purchasing of designer and branded clothes for discount stores. It has something to do with April Marcus' success that many of the stores to which it sells, including its largest customer, are stores in which April Marcus principals have equity interests ranging from 25% to 70%. In any case, the firm is well reputed and profitable. For sheer elegance and genius, however, probably nothing in April Marcus merchandising history can match the deal that April Marcus worked out with Eagle Clothes. Let's make it clear that April Marcus did nothing so Wall Streetishly pedestrian as to risk a lot of cash to, say, buy or bail out Eagle. Cashless, crippled, even moribund, Eagle instead acquired April Marcus, using cash advanced by a bank, a large amount of notes in favor of the April Marcus folks and control of 43% of Eagle's outstanding shares. In other words, the sick company bought the healthy one.

You might conclude that it makes no sense to sell your profitable business to a loser, especially when you have to finance the transaction yourself. But this loser was a publicly held loser. Now that the market has assessed Eagle's earnings (virtually all of which come from April Marcus), the price on Eagle stock has recently risen to some $16 a share, from 25 cents in the second quarter of 1981. That makes the control-group insiders' interest worth more than $30 million, not to mention the $15.5 million in cash and notes they got for April Marcus. So it comes about that Stanley Goldman now sits on nearly $6 million worth of the stock, although he is no longer in charge of Eagle's executive flock. Mortimer April, the 77-year-old founder and chairman of April Marcus, and his associates and kinfolk have seen to that.

In many ways, the Eagle/April Marcus deal made perfect sense. It effectively shelters a lot of Eagle/April Marcus' future earnings from taxes with a $33 million carryforward that Eagle had run up but found unusable, because it had no earnings to shelter. It provided new jobs (but also some unaccustomed public visibility) for April Marcus principals and their relatives. Under contractual agreement, Eagle provides them perks they enjoyed as private entrepreneurs: new cars every three years, some expense money that needn't be accounted for, the use of pieds-à-terre in Manhattan, a $20,000 job for one of the kids.

From the shareholders' viewpoint, there are accounting goodies, too, arising from the deal's ingenious construction. For example, because the notes used to effect the acquisition carry interest rates of only 9%, Eagle's interest costs are lower, and earnings higher, than they would have been.

Walter Feldesman, a lawyer, was a key strategist in the deal. Feldesman, who is married to Mortimer April's niece, sits on a batch of corporate boards, including two that have experienced Chapter 11 ordeals: National Shoes and Saxon Industries *(see* FORBES, *July 19, 1982)*. When he helped arrange Eagle's takeover of April Marcus, Eagle was controlled by Louis Kuhn, a clothing manufacturer whose

Cashless, crippled, even moribund, Eagle acquired April Marcus, using cash advanced by a bank, a large amount of notes in favor of the April Marcus folks and control of 43% of Eagle's shares. In other words, the sick company bought the healthy one.

Eagle President Marvin Blumenfeld
The deal's the thing.

business had bailed Eagle out of Chapter 11 by lending it some $2 million. In return, Kuhn's family got 43%, or 2,177,217, of Eagle's shares. When Eagle acquired April Marcus, half the stock, or 21.5%, went to the April Marcus principals. The Kuhns remain owners of 21.5% of Eagle stock, but the voting rights are held by April Marcus principals. Also issued was a new preferred series for the April Marcus folks and the Kuhns, which, if converted, would eventually give them a total equity of 75% in Eagle.

No one has challenged the transactions except for a sour-grapes corporate shareholder who, in a lawsuit, complains of wrongly being shut out. Eagle responds that the deal was approved by a federal court, in bankruptcy. The shareholder, a creditor in Eagle's bankruptcy, has complained in a New York court that Eagle reneged on a deal to let the shareholder rescue Eagle and instead gave the stock away, through Kuhn, to April Marcus. But Robert Kuhn, an Eagle director, insists, "We didn't try to maximize April Marcus at the expense of Eagle."

Indeed, on the face of it, Eagle looks robust. For the six months ended Jan. 31, sales were $50 million and earnings after the tax-loss carryforward benefit were $3 million, or 60 cents a share. At this rate, Eagle might earn $1 a share by the end of its fiscal year on July 31. Blumenfeld says that April Marcus clients maintain a gross margin of 45% to 50% on their sales after markdowns, much higher than most retailers. He estimates that the company's clients could open more than 100 stores to meet strong demand for off-price goods across the country.

Blumenfeld estimates that Eagle board members and their relatives have equity interests in 40% of the 200 stores under contract to April Marcus. Is this a conflict of interest? "We consider this a strength," he says. Under a resolution by the Eagle board, those stores will not expand into new markets but can grow where they now are. And most are on ten-year contracts entered into before April Marcus went public.

No question about it: This was a fascinating, intricate financial operation. But that is scant argument for buying the shares when they are offered to the public at rather high price-to-earnings (exclusive of extraordinary items) and price-to-book value ratios.

April Marcus has salvaged the investment of Eagle's distressed public shareholders and done handsomely for April Marcus' owners. But now the public will be offered new shares at a much higher price, and that means a higher risk. ■

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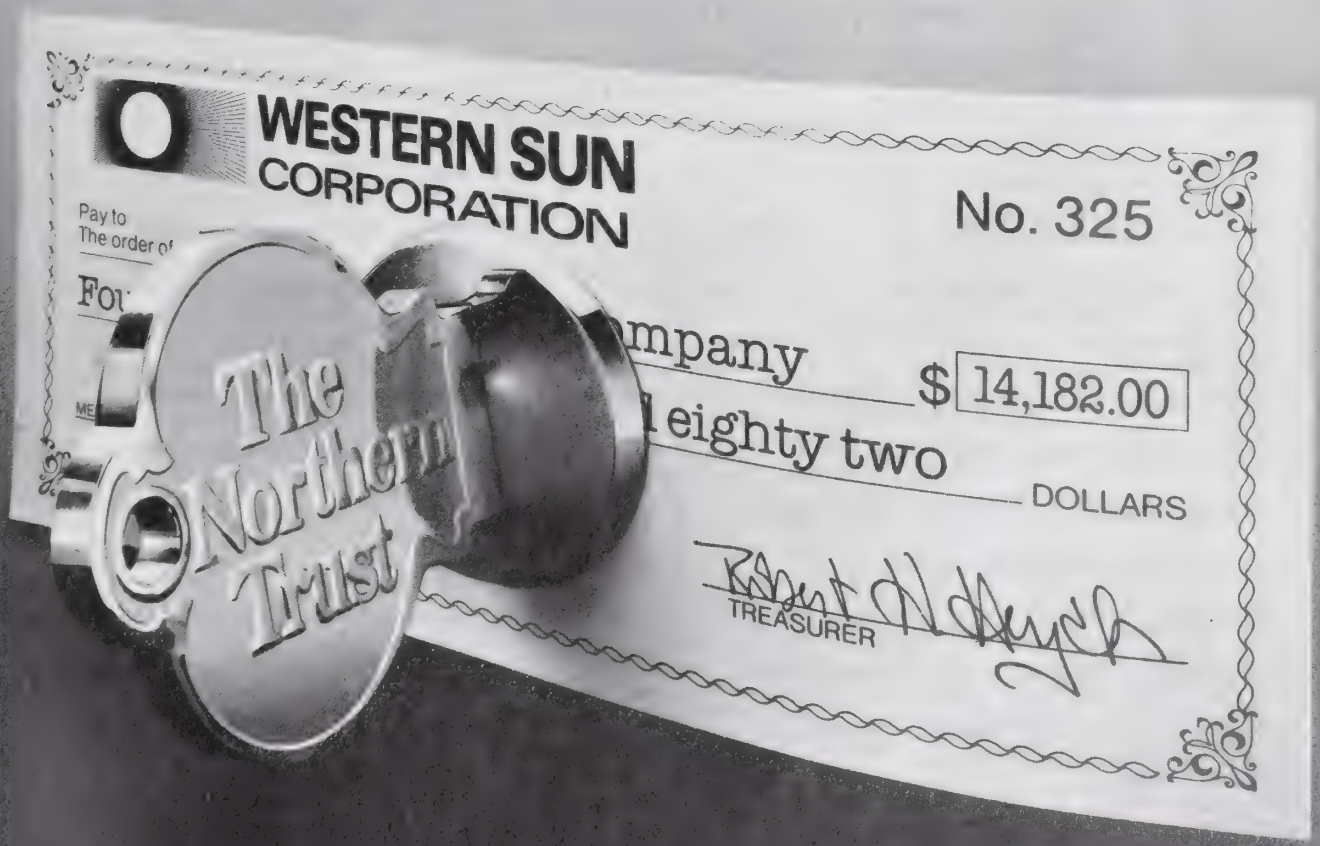

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April 27, 1983

For two decades Deluxe Check Printers has been laughing about the so-called checkless society—all the way to the bank. Now things may not be so funny.

Cancel that complacency

By Jeff Blyskal

EUGENE OLSON, chairman of Deluxe Check Printers, must be sick of this old story: With more people using automated teller machines, fewer checks will be written. And that means less business for Deluxe, which gets up to 95% of its sales from printing billions of checks each year.

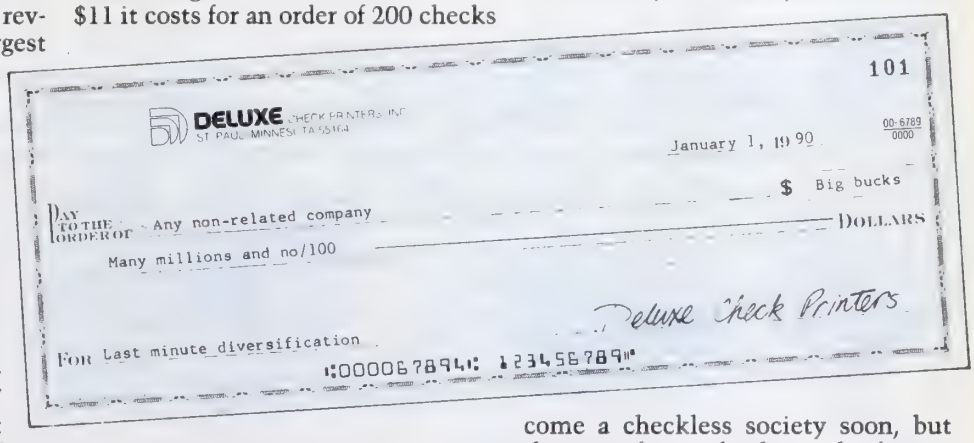
"Folks have been saying that since 1963," says Olson. Meanwhile, revenues at Deluxe, the nation's largest check printer, have grown fifteenfold, to $550 million last year. Return on equity, which hasn't fallen below 20% in a decade, topped 26% in 1982. And despite the doomsaying, more checks than ever are being written. No wonder Deluxe stock sells at an earnings multiple of 15, an eight-year high.

There are, however, clear signs that something is nibbling at Olson's major market. Since 1977 the annual growth rate of orders at Deluxe has declined from near 9% to almost zero. At the same time, check usage nationally has maintained a steady 5% to 6% annual growth rate.

What's happening? For one thing, Deluxe is probably losing market share to more aggressive competitors—perhaps as much as seven percentage points since 1979. In addition, those who saw the danger of electronic competition were right, but so far the effect is less significant than they predicted. The nation's 32,000 automated teller machines, mostly located inside banks, only reduce the number of checks written for cash, about 4% of all transactions.

The worst, however, is yet to come. "The real impact of electronic funds transfers will be from point-of-sale ATMs and debit cards," says Paul Metzker, an economist at the Federal Reserve Bank of Atlanta. These payment systems will soon start eating into the 32% of personal checks written directly to merchants. Banking by home computer should also eliminate many checks used to pay household bills, roughly half the total.

A more immediate threat to growth in check demand may come from bank deregulation. While the $4 to $11 it costs for an order of 200 checks is not expensive, the 50 cents to $1 it takes to process each check completely is. As banks become more competitive, more of these costs are being passed to consumers.



Check-writing on the wall
Today's secure niche, tomorrow's last-minute acquisition?

All this explains why Metzker thinks check-writing growth will gradually decline to zero by 1990. That is good cause for alarm at Deluxe. But what about the company's current order growth, which has skidded to near zero?

A good part of Deluxe's expansion in the Seventies came by taking business away from smaller competitors, as it covered the map with some 60 plants in 33 states. Firm numbers on the industry are hard to come by, but in a 1972 prospectus Deluxe said it had approximately 50 competitors. By 1982 Deluxe's 10K cited just 35. "The popular wisdom among check buyers," explains Dan Walden, an assistant vice president at Bank of America, "is that today there are about 18 to 20 major suppliers; in five years there will be only 5."

That means stiffer competition, and right now Deluxe is hardly holding its own. Atlanta-based John H. Harland Co. has maintained a 12% annual unit growth rate for the past five years. Privately held Rudco as well as Harland recently moved into the California market, where Deluxe and American Standard's American Bank Stationery are dominant. Meanwhile, Rocky Mountain Bank Note, another private company, is also increasingly aggressive.

None of this seems to ruffle Olson. He denies his unit market share is falling—from 61% in 1979 to 54% in 1982, by FORBES' estimates.* Instead, he says the figure rose slightly last year. Olson admits, however, "We really don't have a good number to deal with."

The U.S., of course, will not become a checkless society soon, but there are fewer checks in the future. Olson knows this. So why doesn't he do something? "We think electronic funds transfers will be evolutionary and slow to develop. The biggest impact will come in the 1990s," he explains. The folks who made buggy whips probably said the same about automobiles in 1918.

Deluxe, meanwhile, certainly doesn't lack for resources to diversify. The company has nearly $80 million in cash and marketable securities. With debt a mere 4% of capital, perhaps Olson should reach for his own checkbook. ■

*Calculated by dividing the estimated number of Deluxe checks by total checks written annually, as reported by the Federal Reserve and American Bankers Association.

A small Danish company's challenge and Eli Lilly's response have made the insulin market a fight worth watching.

Healthy competition

By Rosemary Brady

IT MAY LACK THE high importance of international competition in computers or autos, but there is drama enough in the challenge that a small, $324 million (sales) Danish company named Novo Industri is offering to $2.9 billion (sales) Eli Lilly & Co. for leadership of the $400 million (sales) world insulin market.

Last year the Danes, who sell insulin in the U.S. via E. R. Squibb, "whittled 4% to 5% from Lilly's market share," says Paine Webber biotechnology analyst Nina Siegler. London brokerage analyst Christopher Marsay of Grieveson Grant & Co. foresees Novo with a 35% share of the growing world market by 1985—up 3% from today—while Lilly will hold 40% of the market, up only 1%.

But forecasts may have to be altered because Lilly is fighting back, both in Novo's European home market and in the U.S. The specter of an insulin price war worries Novo President Mads Ovlisen. "Our research is awfully costly," says Ovlisen, at his headquarters outside Copenhagen. "We cannot afford to compete on price alone to supply a low-priced U.S. insulin market."

But if he can't stand the heat, why did Ovlisen—an attorney with an M.B.A. from Stanford University—put Novo into the kitchen? Partly because he may have thought Lilly was a complacent pigeon, and partly because his heads-up drug and specialty chemical company needs the U.S. market to continue its rapid growth.

Insulin, used to control diabetes, is the pancreatic hormone essential for the metabolism of carbohydrates. It was not, until recently, a hotly competitive business. Until 1980 Lilly had some 90% of the $180 million U.S. insulin market. Novo, another Danish company, Nordisk, and West Germany's Hoechst were the leaders in the European markets ($130 million sales), where drug prices are frequently regulated or subsidized by government via national health insurance schemes. Regulation didn't make drugs cheaper in Europe. On the contrary, insulin prices were lower in the free-market U.S. But Lilly efficiently managed about a 15% margin on the product.

Novo, meanwhile, prospered on the 18% to 20% margins available in Europe, where the competitive edge could only be achieved by product differentiation. This led the Europeans to develop new strains of insulin—slow-acting (reducing frequency of injections) and purified insulin. These insulins were an improvement on traditional products—developed from the pancreases of pigs or cattle—and fetched a higher price. But Lilly initially lagged in new insulin technology. It made slow-acting insulin

President Mads Ovlisen and Chief Financial Officer Kaare Dullum of Denmark's Novo Industri
Lilly slept while they developed new insulins, awoke only when they moved into the U.S.

under license from Nordisk and Novo and did not introduce purified insulin until 1980, just before Novo began to sell the purified brand independently in the U.S.

An aroused Lilly then tried to break ahead in the technical competition, announcing plans to market a genetically engineered human insulin—identical in molecular structure to the insulin produced in the human pancreas. Novo responded by rushing its biochemically produced human insulin into European markets last year, while Lilly went into Britain, Holland and Germany. It now claims a 15% to 20% price edge over Novo in those markets. In the U.S., Lilly plans to launch its Humulin in July at $10.35 per vial, the same price as its purified insulin. Novo is still awaiting FDA approval for its human insulin.

Both Lilly—spending $70 million on fermentation plants for human insulin in Indianapolis and Liverpool, England—and Novo are expanding capacity. They believe the new product will bring a major improvement to the diabetic's life, though as yet there are no clinical results to confirm this. Both companies also see a growth market, as health standards improve in the rest of the world, where insulin sales today total only about $90 million.

Meanwhile, Novo has geared for battle by raising $200 million in international capital markets, including $100 million last month in a stock issue on the New York Stock Exchange, where its ADRs are traded. Currently, Novo sells at a high 24 times earnings, with investors either favoring its chances in insulin or looking for a continuation of the growth that has seen its earnings more than quadruple since 1977, to $57.2 million, on a 200% rise in sales.

They may be disappointed. Novo, a tightly managed, research-oriented company, gets half of its sales volume from industrial enzymes, which it sells to detergent makers as well as the dairy, juice and alcoholic beverage industries. But its enzyme sales have flattened out in the last year, growing only 9%, compared with 35% sales growth in pharmaceuticals. Ovlisen says the enzyme business has growth potential worldwide, but clearly is banking on the U.S. insulin drive. "Success in the U.S. isn't crucial," he says, "but it's important to our growth and profitability."

Squibb sets prices under the marketing agreement, with Novo getting a percentage of list (insulin now costs between $7 and $11 per 1,000-unit vial, about a 25-day supply). That is why Ovlisen worries about the possibility of a U.S.-style price war. He would prefer to compete, as in Europe, on the basis of new products from the laboratory.

Novo spends 10% of sales on research and development, while Lilly spends 9% of its much larger total sales. But this is no David and Goliath contest. The two companies are about evenly matched in insulin, despite their overall size disparity.

Novo, which does 98% of its business outside Denmark, is a formidable competitor. It has top executives—such as chief financial officer Kaare Dullum, a University of California (Berkeley) M.B.A.—smart enough to make it the first Scandinavian company to raise capital on the Big Board. Ovlisen, 43, only the third president of 58-year-old Novo, handicaps the race this way: "I don't think Squibb/Novo will be the dominant insulin-supplier in the U.S.," he says, "but Lilly is trying to accomplish a difficult task by breaking into Europe. It will be an uphill battle for them."

The lesson: Competition brings improvement. Lilly has learned, and all U.S. business should take heed, that there are no comfortable markets in today's shrinking world. And, in quality and price of their essential medicine, the real winners are the world's diabetics. ■

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Despite a kiss-and-make-up first quarter, the outlook is far from rosy for the long-time arrangement between Saudi Arabia and Aramco's U.S. partners.

Can this marriage last?

By Carol E. Curtis

AT FIRST BLUSH, the four giant companies that produce Saudi Arabia's oil would seem to have proved that it pays to have the right connection in the Middle East. While the rest of the U.S. oil industry saw net income fall an average of 26% in the first quarter, Arabian American Oil Co. (Aramco) partners Exxon, Texaco, Mobil and Socal announced an average profit jump of 12%. Only Texaco showed a drop.

The gain was from Saudi Arabia's retroactive decision in March to lower its crude oil price, from $34 to $29 a barrel. The $5-per-barrel premium the companies had been paying over market price—and losing hundreds of millions on—therefore disappeared virtually overnight.

But huge as the benefit was, it may be small comfort to the companies. For in last year's first quarter, when the Saudis stubbornly held the price at $34 despite a weak market, they sustained losses of up to $1.75 per share on Saudi oil. The loss in the 1982 first quarter was nearly twice what the companies have gained back so far this year. So the Aramco companies are still behind, despite their apparent gain. What's more, if Saudi oil gets overpriced again, the penalty will quickly reappear, to the tune of up to $1.70 per share for each $1 per barrel that the Saudis price their petroleum above spot market prices *(see table)*.

If demand for oil does not stage a dramatic comeback, the Saudis and Aramco could soon reach a crisis in their decades-old relationship. The price for lifting Saudi oil may simply become too high. "In an era where there is lots of crude," asks Oppenheimer oil analyst Art Smith, "what is the advantage of a long-term contractual commitment?"

When the Saudis dropped the price to $29 a barrel they also ended the requirement that the Aramco companies lift a minimum amount of oil. That was because the Saudis agreed to become OPEC's "swing producer" and lower their output drastically to maintain the $29 price. Saudi oil production is an estimated 3.7 million barrels a day, about a third of capacity.

That's all right with the companies. In fact, it's arguably what's holding this marriage together. The companies easily cut their Saudi production in half, from an average of about 5.6 million barrels a day last year. They don't have to make up most of that oil because they just don't need it.

What they do need, they can buy elsewhere for less. The spot market has been awash with cheaper oil.

But comfortable as the companies may be with the new arrangement, it causes problems for Saudi Arabia. Oil experts estimate that the Saudis require a minimum of 6 million barrels per day of production to support their ambitious budget and industrial infrastructure without deficit financing. For most countries, deficits are a way of life, but the Saudis are accustomed to running a surplus. They can live with a deficit but they don't feel comfortable that way.

Saudi Oil Minister Ahmad Zaki Yamani has issued a quiet ultimatum to Aramco: Raise Saudi production to the 5-million-barrel level by the end of next year's first quarter. The possible alternative? Don't count on coming back for the oil when you need it.

However, Free World oil demand now stands at less than 37 million barrels a day, down from over 46 million five years ago. OPEC production is about 14.5 million barrels a day, well below its self-imposed ceiling of 17.5 million. Unless demand rises sharply the companies may not be able to oblige.

The Aramco companies do not expect that to happen. They argue that people will not go back to their old, pre-oil-shock habits that wasted fuel, nor will they tear the insulation out of their attics just because oil falls from $34 to $29 a barrel—or $20. In a recent long-term forecast, Socal projects that world demand for oil will grow only 1% per year through the 1990s. So why don't the oil companies just walk away from Aramco? First Boston oil analyst William Randol says: "If they believed their own forecast, they would walk away from Saudi Arabia." Randol and others like him argue that with at least 165 billion barrels of oil—about a quarter of the world's total—Saudi Arabia remains by far the biggest source of petroleum. Long-term access to that giant reserve may well be indispensable. So there is a conflict here between the companies' long-term interests and short-term needs. The decisions to be made are not simple ones. ■

Stormy relationship

Last year costly Saudi oil penalized the first-quarter earnings of Aramco partners by as much as $1.75 per share, according to First Boston's William Randol. This year cheaper Saudi oil produced huge first-quarter gains. But what will happen if Saudi oil is priced over the market again? Even assuming 1982 liftings, as we do here, estimated losses would be enormous.

Company	Estimated per-share loss on $34/bbl Saudi oil, 1st quarter '82	Estimated per-share gain on $29/bbl Saudi oil, 1st quarter '83	Estimated per-share annual penalty for each $1/bbl premium over market on Saudi oil
Exxon	$0.60	$0.35	$0.52
Mobil	0.60	0.35	0.60
Socal	1.50	0.85	1.30
Texaco	1.75	1.15	1.70

Source: William Randol, First Boston

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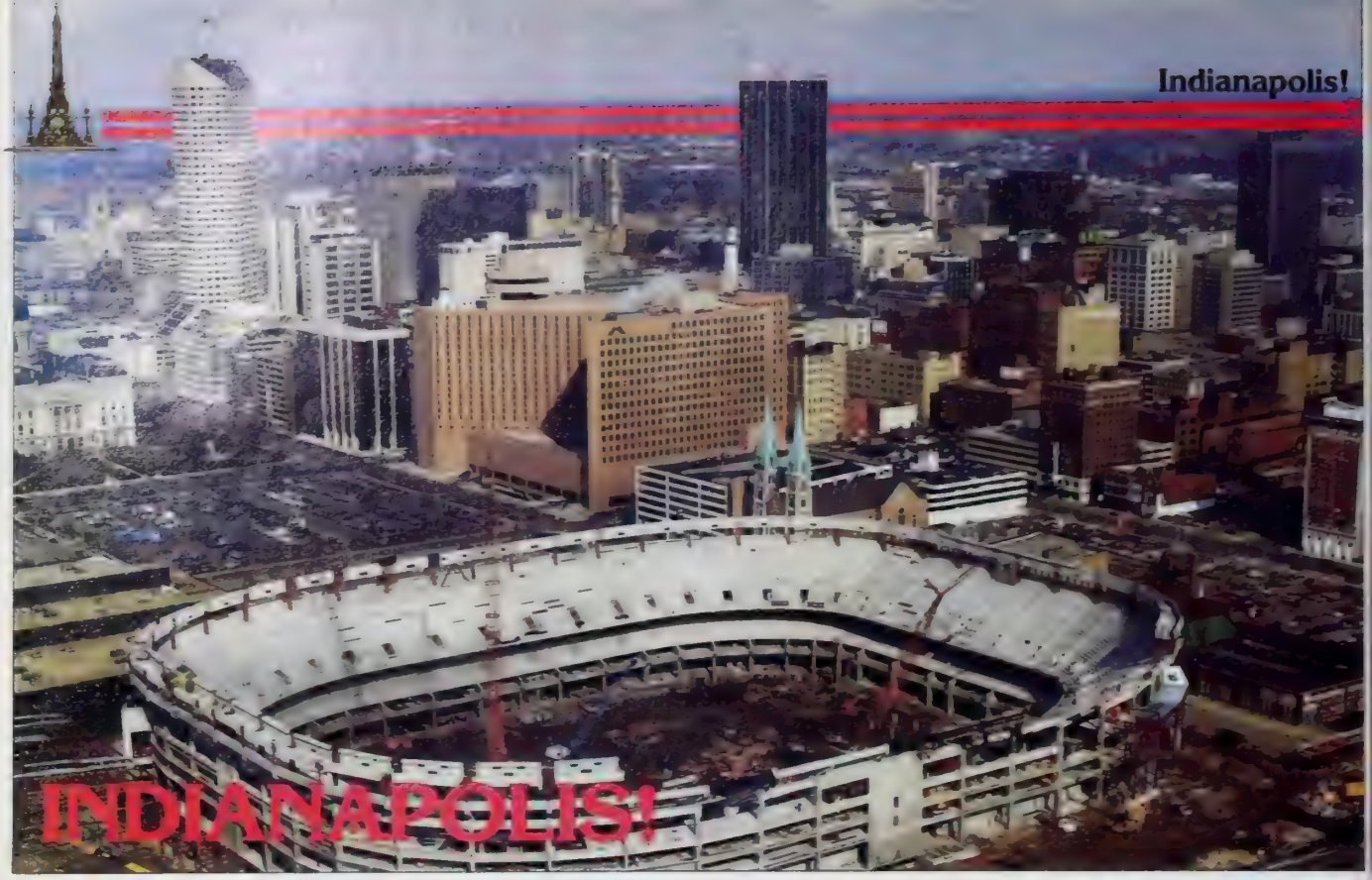


Indianapolis is waiting for the dome on the Hoosier Dome. Slated for mid-1984 opening—ahead of schedule—this 63,000-seat stadium is Indianapolis' prime bait for an NFL expansion franchise. It is also an on-grade addition to the adjoining Indiana Convention-Exposition Center. The new AUL Building is at left.

Indianapolis has guts!

A rather brash statement for a conservative sprawling metropolis in the verdant heartland of the Midwest? You bet!

But the plain fact is, how else could you describe a city which is building the seventh domed football stadium in the country, yet doesn't have an NFL franchise? This apparent bravado has a logical explanation, however, but the magnitude of the undertaking is symptomatic of a city once considered—let's face it—blah.

As a near-great city, Indianapolis has come on rather late, which has not hurt one whit; other places may have surged prematurely. Indianapolis is striving to be the state of the art. Civic leaders may differ on what really pulled the trigger on Indianapolis. Some cite the 36-story Indiana National Bank, built in 1970 and honored as the first new major downtown office building in 25 years. Others credit the Indiana Convention Center. At the moment of its dedication in 1972, it was the sixth largest facility of its ilk in the nation.

But by the '80s, it had fallen to 41st in size as other cities built ever grander colossuses to attract lucrative trade shows and conventions.

So now comes the "guts" part, tempered with a bit of Hoosier ingenuity. More about that word "Hoosier" later on. It was decided, in a burst of "have your cake and eat it" mentality, to enlarge the convention center by adding an $80-million, 63,000-seat ostensibly sports stadium. Plus a few extra acres of offices, rooms and exhibit space, all on grade. Clever.

The next question was, How do we pay for it? It was easy. Lilly Endowment, which has channeled Lilly pharmaceutical dollars to help sponsor much of the city's civic and cultural progress, came forward with a gift of $25 million, provided that the expanded facility would commit to the growth of amateur athletics. No problem—great idea. Indianapolis-based Krannert Foundation (Inland Container Corporation) came forward with $5 million. The remaining construction money was raised in one day through the sale of revenue bonds. Debt service was assured by a one-percent tax on restaurant sales. It sounds effortless; it was not. Guiding various aspects through the State Legislature, the City Council and myriad pressure groups took cool leadership. The Hoosier Dome became a reality.

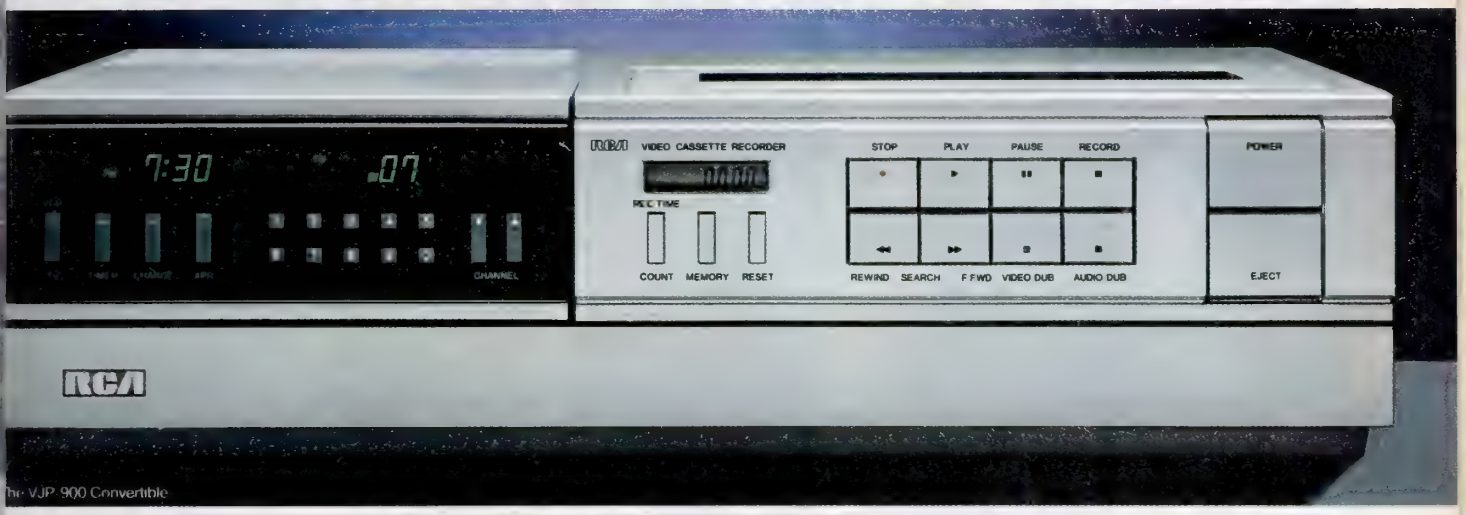
Hizzoners

Even the most grudging Democrats would likely admit that the city's ascendancy has been keyed by two remarkable Republican mayors.

The first, beginning in 1968, was Richard G. Lugar, now the senior senator from Indiana. An Indianapolis-born Rhodes scholar, the brilliant, articulate and tireless Lugar's forte was leadership and organization. His chief contribution was Unigov, a consolidated government program to bring suburbia and the central city together to eliminate many duplications of costs and services.

It is not fair to compare Dick Lugar and the current mayor, William H. Hudnut III. They both have style. Physically they are completely dissimilar. Bill Hudnut attracted a great deal of attention in 1982 when he was president of the National League of Cities. But at six feet five, Hudnut naturally attracts attention. He is a Phi Beta Kappa from Princeton and a former Presbyterian minister. Fortunately, he served the right church,

FINALLY, A PORTABLE VCR THAT WON'T MAKE YOU WISH YOU BOUGHT A TABLE MODEL.



Take a moment to study the photograph above. What it reveals is an unparalleled achievement in video cassette recorder engineering. The RCA 900 Convertible.

On the one hand, and one hand is all that's required, it's the first instantly portable VCR. The first VCR without cables joining the recording deck to the tuner-timer. One need only push to connect, pull to disconnect. There's no fuss, no muss, no bother.

It immediately converts to a lightweight, compact, complete movie outfit with the addition of a camera (like RCA's astonishingly versatile CC015). And it operates more than 60 minutes on a single charge of its nickel-cadmium battery (not included).

On the other hand, it's the first table model (or portable, for that matter) to offer a recording/playback system with five heads instead of four. And you get amazingly clear, jitter-free special effects at two speeds (SP & SLP) instead of one.

It takes two sharp eyes to discover where the recording deck leaves off and the tuner-timer begins. Without making a feature-by-feature comparison, about the only way to distinguish the 900 from any other top-of-the-line table model is its name: The Convertible.

There's more, of course. More than a dozen other outstanding features.

Up to 21-day electronic programming, eight-event/eight-hour recording capability, sound-on-sound and stereo playback, audio and video dubbing, 133-channel capability (63 cable, where available), even—incredibly—frequency-synthesized tuning that locates and locks incoming signals precisely on track.

Not to mention a full-function, infrared remote unit to control the 900 from the cushion of a comfortable chair.

All of which can only lead to one conclusion:

THE RCA 900 CONVERTIBLE. THERE IS NO EQUAL.

One federal court has ruled that in-home recording of copyrighted television programs is copyright infringement. Such recordings should not be made.

For the complete line of SelectaVision VCR models and color video cameras, write to: RCA Consumer Electronics, Department 32-312K, 600 North Sherman Drive, Indianapolis, IN 46201

"When you consider Indianapolis in your business' future, we have something you need to know about its financial strengths."

Frank E. McKinney, Jr., Chairman
American Fletcher Corporation
and American Fletcher National Bank

"American Fletcher Corporation has a unique vision of Indianapolis' future. A vision that rises out of our position of leadership as an Indianapolis-based $3 billion corporation engaged in commercial banking, leasing, mortgage banking and related financial services.

"Being the parent company to the state's largest bank, American Fletcher National Bank, and holding a presence in 35 Indiana communities as American Fletcher Financial Services, we also enjoy an intimate knowledge of Indiana. With a perspective only an organization such as ours could have, our insight can help you acquire a more complete picture of Indianapolis and the entire state of Indiana."

For a further discussion of this special business point of view, we'll send you our brief cassette titled, "Indiana, A Banker's Perspective," compliments of American Fletcher. To receive your copy write on your corporate letterhead to: Indiana, A Banker's Perspective, American Fletcher National Bank, 101 Monument Circle, Indianapolis, IN 46277.

AMERICAN FLETCHER NATIONAL BANK

AFNB

INDIANAPOLIS

Second Presbyterian, whose congregation includes many of the city's business elite. From there, he went into politics and even unseated, for one term, the now ninth-term incumbent congressman, prickly but fair Andy Jacobs.

Hudnut loves being mayor (he took office in 1976). He loves people. He exudes enthusiasm and confidence. He listens. He also talks well, as a minister should. He generates force, but he is not the source of it. His base for moving the city forward is an effective and very real blending of the private sector with the public sector. It's a great apolitical partnership, embracing all kinds of people.

Mayor William Hudnut III is popular with both parties and loves to talk about his administration's public sector-private sector relationship.

Three public-private projects helped earn Indianapolis the title of All-America City in 1982 (the city celebrated with a great party downtown for everyone). One of these projects was the peaceful desegregation of Indianapolis public schools. There was a chance for mischief here, like Louisville or Boston. Problems did arise, but the distinction was that both blacks and whites *wanted* desegregation to work.

The second project of note was the creation of the Regional Center Planning Committee—150 volunteers, experts in all areas of downtown revitalization. A City Center was established on Monument Circle, featuring educational exhibits and a giant scale model of the blossoming Regional Center. All visitors, not just the original 150 planners, were encouraged to applaud, criticize and suggest.

The third acclaimed project was the Urban Reinvestment Task Force, involving the city's banks and financial institutions. They agreed to make loans to rehabilitate older housing, with some added help from Lilly Endowment (again!) and federal grants. This has not been a roaring success, but rehabilitation is happening nonetheless through private sources.

Bricks and Mortar

Every city yearns for a large and distinctive skyline. Indianapolis finally has one, even if we do have to program photographers to catch just the right angles. Ours is not conven-

mannheim boehringer

Partners in Growth with Indianapolis

Boehringer Mannheim Corporation, the United States subsidiary of Boehringer Mannheim GmbH, West Germany, has been headquartered in Indianapolis since 1975

Boehringer Mannheim Corporation is part of a multi-national company that is one of the world's leading producers of chemicals and health care products. Its presence in the U.S. health care market was established with the acquisition of Indianapolis-based Bio-Dynamics, Inc

Also located in Indianapolis are the headquarters, manufacturing and distribution facilities of the Boehringer Mannheim Diagnostic Group and its three sales divisions which manufacture and market a broad line of chemical and health care products

- Boehringer Mannheim Diagnostics—large clinical analyzers and reagents for hospital and commercial laboratories
- Bio-Dynamics—the most complete line of diagnostic instruments and reagents for use in physician office laboratories, the only rapid diagnostic test strip that detects leukocytes in urine, and the most widely used visually-read test strip for self blood glucose testing by diabetics
- Boehringer Mannheim Biochemicals—enzymes and fine chemicals used in many industrial and pharmaceutical research and production processes

Boehringer Mannheim employs over 500 people in the Indianapolis area. The company is contributing to the growth of Indianapolis' economy not only through its payroll and taxes, but through its business relationships with many local companies who supply a wide range of products and services

Indianapolis provides a good business climate for us to grow with, while providing the educational system, cultural activities and recreational opportunities that allow our employees to enjoy a pleasing personal and family life. We look forward to a long and mutually prosperous partnership with Indianapolis, its people and its businesses

mannheim boehringer

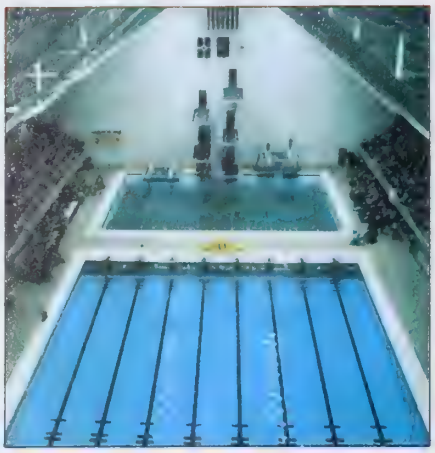
Boehringer Mannheim Diagnostic Group

Boehringer Mannheim Diagnostics
Bio-Dynamics
Boehringer Mannheim Biochemicals

iently strung along a natural lake barrier like Chicago or compressed into a rocky finger of land like Manhattan. But it's there, and we smile as we take the 10-minute zip from Indianapolis International Airport via interstate to downtown.

Although this essay is more concerned with feel than with fact, let's be specific for a moment. The highway system through and around the city is first rate. An inner loop serves downtown, and Interstate 465 completely encircles the central city at a radius of 8 to 10 miles. Four major interstates channel into this neat arrangement. Add to all this the legendary Monument Circle and it's easy to see how we earned the truckers' nickname "Circle City."

Downtown is more than "alive and well" in Indianapolis. The Circle is the focal point. It is gorgeous, and newly bricked for a block in all four directions. Much of the paving was paid for by selling bricks at $25 apiece to the general public. Bus traffic has been removed. It features renovated buildings, a sidewalk café, street vendors and the imminent return of the Indianapolis Symphony Orchestra to the old Circle Theatre, another of many historic preservation projects.



The world's fastest swimming pool is in the new I.U. Natatorium. Because of its overall seven-foot depth, shock waves sent out by swimmers bounce back after the thrashing bodies have passed.

The Circle is a natural for every parade, Christmas caroling group, street fair, visiting dignitary and would-be extravaganza that comes to the city. The Circle Monument is also the world's tallest illuminated Christmas tree. But the high point of the year is strawberry time (honestly!) when Christ Church makes homemade shortcake for just about every blasé office worker in the Mile Square.

There is already much to admire downtown; for example—open space. The wide streets in the Mile Square were laid out by Alexander Ralston and Pierre L'Enfant, the same planners who did Washington, D.C. It wasn't until 1818 that settlers began to move into central Indiana (the Indians gave up Indiana grudgingly). By then, narrow streets were out.

The broad avenues create smooth traffic flow to such showplaces as the 18,000-seat Market Square Arena, which hosted the 1981 NCAA basketball finals. The new Merchants Bank

Left, Max S. Danner, Chairman of the Board
Right, Mark S. Danner, President

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ARE AS
DIVERSE
AS THE
EAS WE'VE
SAILED

In business, the opportunities for growth are what you make of them. While the name Mayflower has always meant moving, today it means even more.

With more than 50 years of prominence in the transportation business, we are making some highly successful transitions.

We've broadened our revenue base by forging into new areas where our past expertise can effectively be put to use. Including the distribution of personal computers, appliances and home video games; the shipping of high technology products; the trucking of consumer items from the manufacturer to the retail store; the packaging of insurance programs for Mayflower customers. And the purchasing and financing of transportation equipment.

Mayflower Corporation is a company with a solid record of growth and expansion. Mayflower. An appropriate name for a company charting new business opportunities.

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The view from the American United Life Tower is magnificent but we've got a lot more to offer than scenery. Full service banking, on site postal service, a Morrison's cafeteria, the prestigious Skyline Club, underground parking, top security and a location that is "at the center of things." Join the professionals at One American Square

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(317) 634-6363

Plaza, with its soaring arboreal atrium and dazzling Hyatt hotel, is a scant block from the Hoosier Dome.

The latest jewel of downtown's majestic crown is the 36-story American United Life Building, which brings 800 more workers to the excitement surrounding Monument Circle. It features the prestigious Skyline Club, designed to be the latest "in" bistro.

The last word in major office buildings will be the new American Fletcher National Bank, the state's largest bank, which already has a half block cleared and landscaped behind its present Monument Circle headquarters. The AFNB building will be in the range of 50 stories when it's ready in the late '80s.

The biggest overall planned project bears the dull name "West Washington Street Revitalization Project, Phase II." A promotion director's dream, it encompasses the four square blocks, as the crow flies southwest, from Monument Circle to the Hoosier Dome. It's a huge complex of retail stores, hotels, office buildings and recreational components, much of it already in place. Phase II involves renovation, at least $100 million in new construction and a lot of scenic glass walkways—all to create a massive covered mall. There is no truth to the rumor that it will be called "Aboveground Indy."

People

No surprise: Indianapolis has a power structure. Surprise: They're a bunch of friendly, readily approachable people. No single individual dominates; actually, the power resides in a group of groups. There's the mayor's office, and then there are the deputy mayors, immediate past and present, all sharp and sensible—and specialists.

Other human energy sources are the Greater Indianapolis Progress Committee, the Commission for Downtown, Indianapolis Chamber of Commerce, Corporate Community Council, Indiana Sports Corporation and the omnipresent Lilly Endowment.

Individuals? There are some without whom nothing significant happens. For instance: three bankers. Frank E. McKinney, Jr., chairman of American Fletcher National Bank, who holds a handful of swimming gold medals from the 1960 Olympics and looks as if he could still do a mean flip turn. Tom Miller, chairman of Indiana National Bank, rotund and jovial, yet incisive and respected for his work with the Convention & Visitors Bureau. Otto N. (Nick) Frenzel III, chairman of Merchants National Bank, from a banking family, handsome and personable, is a quiet and strong influence.

Two Toms: Binford, former banker, current president of the Indianapolis Chamber of Commerce and chief steward of the 500 Mile Race...and Moses, former chamber president and still president of the Indianapolis Water Company.

A mixed group: Richard D. Wood, chairman of the giant Eli Lilly & Company; John Burnside Smith, third-generation chairman of the growing Mayflower Corporation; Jim Morris and Tom Lake of Lilly Endow-

This magnificent and celebrity-studded ceremony opened the National Sports Festival, held at Market Square Arena. The Festival was the highlight of a year in which numerous major sports events were held in extraordinary new facilities in Indianapolis.

We'll beam you aboard the Information Age.

The Information Age is no longer in the future. It's already here.

It's a technological age that is changing the way we live. Work. Even the way we relate to one another.

And on the leading edge of this changing technology is a changing Indiana Bell.

We've leaped into the Information Age, and already we've achieved a level of productive high-tech efficiency that continues to surpass the country's average by a wide margin.

To present and planned businesses, it means we're able to provide access to digital transmission facilities. The fast, reliable and virtually maintenance-free way to accommodate voice, data, video and facsimile.

It means microelectronic technology abounds. The way to do much more, with much less.

It means sophisticated software exists to offer customers information handling benefits that they previously could not afford.

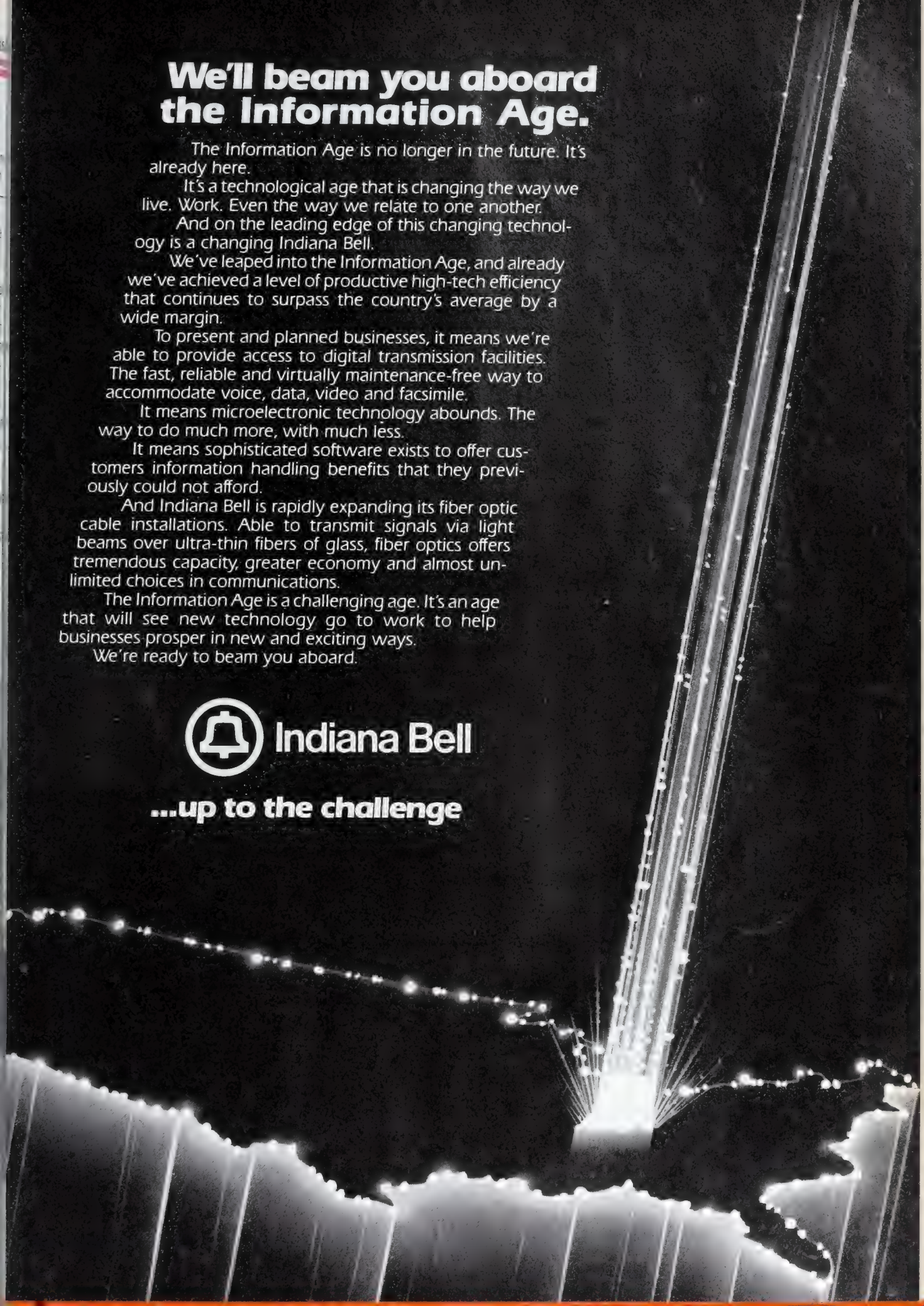
And Indiana Bell is rapidly expanding its fiber optic cable installations. Able to transmit signals via light beams over ultra-thin fibers of glass, fiber optics offers tremendous capacity, greater economy and almost unlimited choices in communications.

The Information Age is a challenging age. It's an age that will see new technology go to work to help businesses prosper in new and exciting ways.

We're ready to beam you aboard.

Indiana Bell

...up to the challenge



ment; P. E. MacAllister, chairman of the Capital Improvement Board; Gene Pulliam (Indianapolis Star-News); Mel Simon (& Associates), the city's representative on Forbes' listing of the 400 richest Americans.

A quintet of attorneys: Byron Hollett, Dave Frick, Bill Welch, Ted Boehm and Paul DeVault. Frick, once a Hudnut deputy mayor, has been the quiet dynamo behind the city's impressive new amateur athletic facilities.

There is strength in the hinterlands, too: like cigar-chomping Ray Kennedy, who has built a Las Hadas-type headquarters at Delta Faucet (Masco Corp.) and acquisition-minded Ron Palamara of Anacomp who recently announced that he will build a 2,000-employee headquarters near downtown.

Industries

Once upon a time, Indianapolis could have been Detroit. Something like 64 makes of automobiles were built here, including such nostalgic names as the Stutz and the Duesenberg. Many of these old cars can be seen at the new Speedway Museum inside the 2½-mile oval track. This automotive heritage explains the 1911 birth of the 500 Mile Race.

General Motors, Ford and Chrysler still have major plants in the city. Other noteworthy companies are BDP (Carrier)—which makes more gas furnaces than anyone in the world—FMC Corp., E-A-R (Cabot), National Starch, RCA and Reilly Tar & Chemical. Ransburg (with Cybotech) is prominent in industrial robot manufacturing.

Government is a major employer. Fort Benjamin Harrison (good duty, no training) is the home of the Army Finance Center, which is paymaster for all the Armed Forces and said to be their biggest building after the Pentagon.

Another booming industry is medicine, and that doesn't mean just Eli Lilly. The Indiana University School of Medicine (the second largest in North America) is located in a beautiful campus complex on the near west side of downtown. The area in general comprises six teaching hospitals, 90 clinics, 10 specialized research centers (including the Krannert Institute of Cardiology), the I.U. Dental School, IUPUI (Indiana University-Purdue University at Indianapolis) and three major sports facilities. It's a world unto itself—and still growing. No wonder the city is beginning to attract a growing number of technologically oriented firms.

Things to Do

Many a resident of Indianapolis could have said—with pride and aching muscles—"I'm glad 1982 is over."

It began in January at Market Square Arena with the National Figure Skating Championships. It was their first time here—and it won't be the last—and the event drew record attendance.

The National Sports Festival came in June, and the city out-volunteered, out-excited and out-drew any previous host of these between-Olympics affairs. Actually, no National Sports Festival had ever earned a profit before.

Plain fact is that ABC-Television carried more sports coverage in 1982 from Indianapolis than from any other city except the Big Apple.

Among the major annual sports attractions in Indianapolis are the Mayflower LPGA Classic, the National Clay Courts, the Fox Stakes and, oh yes, that little Memorial-Day-weekend event at the Indianapolis Speedway. But it's not just the events—it's the terrific new facilities. Three of these are on the campus of IUPUI: the I.U. Natatorium, the I.U. Track & Field Stadium and the Indiana Sports Center (tennis). All are spectacular, but the Natatorium is astounding. It has an Olympic-class, 50-meter pool and a diving pool (with elevator) upstairs for spectators. Downstairs is another 50-meter pool for practice and—get this—a smaller pool with a movable bottom that rises flush with the deck. The latter is for medical rehab purposes (remember, it's on the med school campus, too).

A fourth superb sports facility, created for the National Sports Festival, is the Major Taylor Velodrome, named for the champion black cyclist.

With its great sports, cultural and scientific facilities, the city is becoming a "crossroads" site for many organizations. Kiwanis International has moved from Chicago to a new showplace in the north suburbs. The American College of Sports Science and Medicine has moved in from Wisconsin. Others already here or packing are U.S. Synchronized Swimming, the Gymnastics Federation (from Dallas), the International Institute of Sports Science and Medicine (part of the I.U. School of Medicine), the U.S. Army Physical Fitness Center, AAU National Headquarters, the U.S. Diving Federation, the National Training Center of Girls Clubs of America and the Athletics Congress. The Sullivan Award, given annually to the best amateur athlete, is hosted here. More Olympic trials fo the '84 Olympics will be held in Indianapolis than in any other city.

Indianapolis influentials really get involved. Mayflower board chairman John B. Smith plunged into the pool after giving the winner's check in the annual Mayflower LPGA Classic to South African Sally Little—also a plunger.

Lifestyle

Let's face it, when you don't have the obvious natural advantages of an ocean or a mountain range, you have to compensate. Indianapolis compensates.

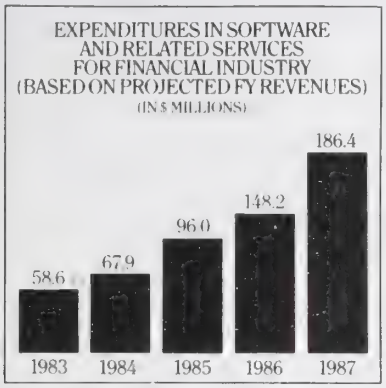
Why Indianapolis? People get along here. Go back to that public sector-private sector thing. Labor has respect and pride here—and a good sense of civic responsibility. Race? Indianapolis is 20 percent black and close to 100 percent color blind.

There are some great "singles joints," but Indianapolis is basically your "go home at five and unwind with the wife" kind of city. A lot of school- and church-oriented stuff. Good schools. Good high-school sports programs. Good physical facilities. In the fall, it's off to Bloomington, Lafayette or South Bend for "tailgate"

YOU CAN TELL A LOT ABOUT ANACOMP BY OUR 1987 FINANCIAL STATEMENT.

No, not our P&L's. Even Anacomp can't develop software that reveals a 1987 income statement before 1987 is even off the ground.

Fortunately, there are other numbers besides those on a P&L that make a statement about a company.

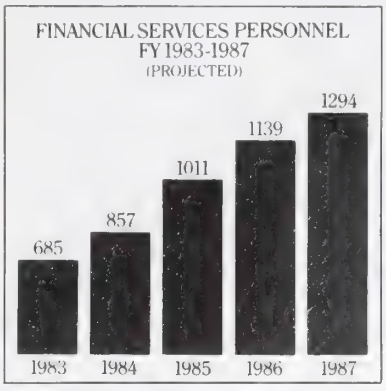


Take, for example, the fact that, based upon projected revenues, Anacomp plans to spend more than a half billion dollars in software and software related services for the financial industry over the next five years. Beginning with fiscal 1983, and driving straight through 1987, Anacomp has projected this funded heavy dollar expenditure for development, enhancement, maintenance and installation of financial software systems. We're planning to expend these dollars in the financial industry because it's our primary market, our bread and butter. (What better place for our bread?)

And lest you think waving dollars is the extent of our commitment, just look at our investment in human resources.

By 1987, almost 1300 Anacomp employees will be assigned to new-product development. Nearly 65% of our entire financial system workforce. Something like 3200 man-years, overall.

And what do we expect our projected expenditure of these dollars and people in product enhancements will net us? Staggering advancements in technology. Product improvements. Performance improvements. But mostly it will be a statement to the financial community. A signal that Anacomp is committed to serve. With all our enthusiasm. With much of our brain-power. And yes, with significant dollars. This is the message we're sending you. Our financial statement.



anacomp™
Indianapolis, Indiana

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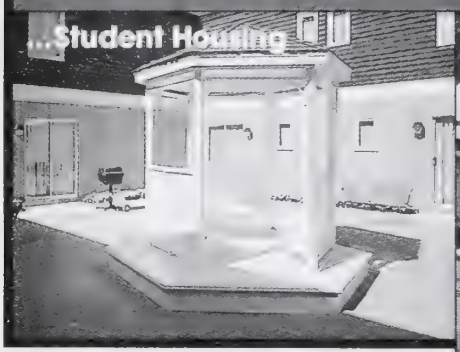
ATRIUM LIVING

A patented system with an interesting new lifestyle.



A Rare Combination of Factors.

The ideal investment opportunity must be more than just the right idea. It must be practical, have good timing and ideally coordinate manufacturing and distributing capacity with demand. Such an opportunity is the Atrium concept.

A patented concept with extensive mechanical claims.
The Atrium concept incorporates four separate units which surround a new and sheltered lifestyle center. It's an indoor/outdoor relaxation or activity area with an astroturf-like surface that lends itself to entertaining or just ordinary sheltered outdoor living activities.

Existing production capacity.
It uses production capacity already in place. Manufacturing these units is merely utilizing existing production lines that are usually available on short notice.

Pent-up demand.
There is a steadily growing demand for housing in the "under $50,000" market. In fact, today, 84% of all new housing in this market is factory built.

Can be produced in any market.
The Atrium concept offers the investor the ability to consider most any geographic market. Today, hundreds of plants across the country are running at less than desired levels. This program allows licensed operators to absorb this overhead.

A "Now" program.
The Atrium concept enables investors to respond quickly to market opportunities. A typical production line can produce 6 to 8 units per day. And a single crane can set 8 units per day at the building site.

This patented concept also indicates exciting potential yields. Write for investor models based on 10-year depreciation schedules.

Now offering a developer licensing program.

Atrium Structures, Inc.

Atrium Structures, Inc., 8900 Keystone Crossing, Suite 401, Indianapolis, IN 46240
(317) 848-6944

Jenn-Air. One of the world's great cooking innovations that didn't come from France.

In this era of nouvelle cuisine and the Cuisinart,® it may be surprising that perhaps the most versatile cooking tool of all has quietly emerged from Indianapolis, Indiana.

It's the remarkable Jenn-Air Grill-Range. And no appliance, from anywhere in the world, puts so many options at the fingertips of the creative cook.

The only range as versatile as you.

First you get the excitement of outdoor grilling indoors. Our surface ventilation system, invented in 1967, removes smoke and grease without a bulky overhead hood. You can enjoy char-flavored steaks, burgers, ribs, and chops 365 days a year.

Our convertible cooktop, introduced in 1972, lets you instantly change from conventional cooking coils to a mouthwatering array of accessories including grill-tops, griddles, rotisseries, deep fryers and more.

And our exclusive Selective-Use radiant/convection oven, introduced in 1976, lets you change from conventional radiant to convection cooking with a flick of a switch. In the convection mode, circulating air cooks meats and poultry up to 1/3 faster while sealing in more of the delicious natural juices.

A Jenn-Air for every kitchen.

We not only give you more ways to cook, we offer a practically limitless selection of models. From island cooktops to wall ovens and freestanding ranges, there's a Jenn-Air to fit your kitchen.

And now, with the "Anywhere Jenn-Air," the first and only ventless indoor Grill-Range, there's a model for highrises, apartments, condos and other hard to vent homes.

Write for the whole story.

Over the past 15 years, we've changed the range from a basic cooking tool into a remarkably versatile cooking system.

But we can only whet your appetite in the space this page allows.

For the whole tantalizing story, see your Jenn-Air dealer for a demonstration. He's in the Yellow Pages. Or write Jenn-Air for our free brochure. Dept. 3NN, 3035 Shadeland Ave., Indianapolis, Indiana 46226.

®Jenn-Air. The finest cooking system ever created.

© 1983 Jenn-Air Corporation. Jenn-Air is a registered trademark of Jenn-Air Corporation.

time or to Brown County for the foliage.

In the spring and summer, three magnificent reservoirs teem with water sports, and their shorelines are dotted with megabuck homes. Other outdoors-lovers spread out to the city parks, the state parks and the lakes to the north.

What They're Saying:

Jenn-Air's Don Lorton: "I've lived all over the Midwest—there seems to be a vision here."

Jim Morris, Lilly Endowment: "Over the next 10 years, Indianapolis will be the most exciting city in America."

Mayor Bill Hudnut: "The Economic Growth Corporation is only the most recent indication that the partnership philosophy still holds in Indianapolis."

Frank E. McKinney, Jr. AFNB: "Indianapolis represents opportunity for prosperity coupled with a high quality of life environment. It is now emerging as one of the great future cities in the country."

This section was written by Frank J. Wemhoff, president of the Caldwell-Van Riper, Inc.
Cover credit: Georgia McGuire

D. Joseph Donahue, vice president and general manager, RCA Consumer Electronics: "We had always believed Indianapolis was a good place for our consumer electronics business...and the spirit of cooperation we have received has only served to reinforce that conviction."

Lt. Governor John Mutz: "People who live in Indianapolis really care about this city. Government can go to private groups for help in raising money for a public project or to pull off a major event like the Sports Festival, and the people respond. The financial package to help retool International Harvester's Indianapolis plant was a model of cooperation among various levels of government. It included federal, state and city training funds and a tax abatement on new equipment approved by the city under authority of a state program authored in 1981."

Bill Vititoe, new President of Indian Bell: "After a six years' absence from Indianapolis, the most impressive change has been the growth of dynamic organizations like the Corporate Community Council and The Indianapolis Project...the marshalling of corporate activities along with service organizations, education and government has given us a much stronger economic base."

Ronald D. Palamara, President and chairman of Anacomp, Inc.: "We recently went through an evaluation of locations for our planned new corporate headquarters and computer center. Our task force looked at sites in the Boston-New York corridor and in California's Silicon Valley, among others. We chose Indianapolis because its centralized location...gives us a significant recruiting advantage from area universities when competing for the skilled technical people who are the lifeblood of our business

From a small center here twenty years ago, Melvin Simon & Associates has grown into the nation's second largest shopping center owner/manager. Pure Simon is a shopping way of life in Indianapolis, and at more than 115 locations in 25 states. With the best yet to come. For more information, contact Jay Rosenfeld or Elliott Freed at (317) 636-1600.

MELVIN SIMON & ASSOCIATES, INC.

OUR MOST VALUABLE ASSETS ARE LIQUID

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When you get into big-time real estate, it doesn't hurt if your name is Bob Tishman and you have a smart son-in-law.

This just might amount to something

By Jonathan Greenberg

STARTING OVER is never an easy thing to do, especially at 61. So when Robert Tishman, then president of Tishman Realty & Construction Co., decided to liquidate his public company in 1978, some wondered whether he might cash in his chips and head for a golf course. After a 40-year career with one of the nation's foremost developers, he had earned it.

Bob Tishman, now 65, didn't do that, however. When he agreed to dissolve the company he had worked for his whole life, he had an ace up his sleeve—Jerry Speyer, his 42-year-old son-in-law and now his equal partner. Working with Speyer, Tishman has realized his lifelong dream of controlling a private real estate empire. He says, "The ability to get out from being an employee—which I was all my life—for stockholders who have no idea what's making the bottom line work is a very enjoyable change."

Boy, is it. While cousin John Tishman continued in construction after the breakup of Tishman Realty and brother Allen formed a management company, both far less ulcerous ways to make a living, Bob plunged into the roller-coaster world of development and has good reason to be glad. Together, Bob Tishman and Jerry Speyer have shrewdly allied themselves with smart money and become nationwide commercial real estate developers. Their net equity in the $1.2 billion worth of high-quality real estate they have developed—a total of 12 projects in New York, Chicago, Atlanta, Houston and Stamford—tops an estimated $100 million. That's probably five times their net worth only five years ago. Tishman admits that he might never have attempted so large a move without Speyer. "There's nothing like nepotism to run a successful company—provided your relatives are smart," he says.

The unique relationships they have established with Equitable Life Insurance and the Crown family of Chicago don't hurt, either. Last year Equitable Life bought into a limited partnership arrangement with New York-based Tishman Speyer Properties, basically buying a share of the profits Tishman Speyer earns on all developer's fees, which range from 2% to 5% of the total cost of a project. Now Equitable has an experienced developer-partner to call upon, and Tishman Speyer has an extremely deep and friendly pocket to dip into. Two months ago Equitable announced plans for a $175 million Manhattan headquarters building. The developers, it surprised no one to hear, were Tishman Speyer.

"Everyone is intrigued by their relationship with Equitable," notes Richard Rosan, president of the Real Estate Board of New York. "Jerry saw that the equity necessary for $100 million-

Robert Tishman with partner and son-in-law Jerry Speyer
"Nothing like nepotism—provided your relatives are smart."

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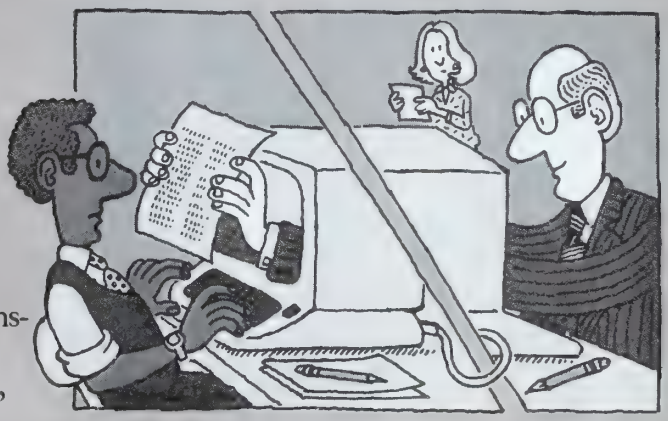

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James F. Beré, Chairman, Annual Report March 11, 1983

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Tishman and Speyer have shrewdly allied themselves with smart money and become nationwide commercial real estate developers. Their net equity in the $1.2 billion worth of high quality real estate they developed tops an estimated $100 million—five times their net worth five years ago.

plus projects is beyond anyone's personal wealth, so he has made available an enormous amount of equity."

Potential equity, that is. Equitable, of course, has the option of not investing in a Tishman Speyer proposal and just collecting its share of the development fees. Similarly, Tishman and Speyer have the option of not investing in an Equitable project.

Five of Tishman Speyer's most important projects to date are joint ventures with those other well-heeled associates, Lester and Henry Crown of Chicago. The Crowns have dealt with the Tishman family since 666 Fifth Avenue was built in 1957, but, says Lester Crown, "At this time we are more active with the Tishman Speyer group than anybody else." Thus, with the Crowns' participation Tishman Speyer is able to advertise to potential joint venturers a "capital availability of $80 million, as well as necessary credit capabilities." Claims Jerry Speyer, "We are as well positioned to do major transactions as anybody in the country."

To be able to ante up alongside the Crowns, who have a net worth in excess of $600 million, Tishman and Speyer needed even more than their original $17 million stake from dissolving the public company. Their first move in 1978 was to the legendary Andre Meyer, who led an investment group for them until 1981, when Meyer died. By then, Tishman and Speyer had built enough equity in the office building boom to buy out their first group of buyers at a profit.

Then Tishman and Speyer could finally afford to turn to the Crowns, who have already helped them build a strong presence in Chicago: for instance, attracting Chicago's two largest banks—Continental Illinois and First National—as major tenants there in two of their largest new buildings.

With 12 regional offices around the country, Equitable should pay off in the same way, but on a national scale. Says Jerry Speyer: "We now have the opportunity of using their national facilities to meet people in local communities we might not otherwise have met."

Speyer thinks that a continued lowering of interest rates will boost residential and then commercial real estate. The much-talked about office glut is keeping him out of new construction in Houston and Denver just now, but he likes Miami, Chicago and New York in spite of the talk. "The rate of absorption for good space in New York is still quite quick. The space that isn't being absorbed right now is the small offices." No problem to him; he builds for large tenants.

He strongly believes in hedging his bets in one city by having interests in half a dozen others. At the moment, then, a high-rise office building is on the drawing board for Miami's Brickell Avenue with another right behind it for Los Angeles.

Tishman and Speyer both wanted to have a lean, professional operation— a "group of chiefs and very few Indians," as Tishman puts it. Each of the top dozen executives has a partnership interest in all the deals the company does. Therefore an executive in New York is partner with both the company and 11 fellow executives. "This avoids intramural competition," says Speyer.

While the company lets others handle its management and construction, it retains in-house experts to keep a close watch on its contractors. Meanwhile, keeping an eye on everything is Jerry Speyer, known as a man who thinks big and nitpicks small, following up on even the smallest details of a project.

An observer notes that despite his age Speyer has had plenty of experience, having been senior vice president of development for Tishman Realty, which he first joined back in 1966. "Bob probably feels much better having a partner who's younger and can do some of the heavy lifting," he says.

Tishman Speyer's offices are on the 6th floor of his new 42-story Madison Avenue building—Speyer would rather rent out the higher-priced stuff to someone with more corporate ego. "Some guys get a kick out of paying $1,500 for a new suit," Speyer says of his personal tastes. "I'd rather buy a painting." (He is a trustee of the Museum of Modern Art.)

Speyer is quite deferential to his father-in-law. "He's the most intelligent and intuitive guy I've ever met in real estate," he says. "And he has given me every opportunity in the world."

Fair enough. Still only 42, Jerry Speyer is likely to make more money from the Tishman name than any Tishman ever has. ■

Faces
Behind The Figures

Edited by John R. Dorfman

Country slicker

Last month Indiana farmer Eugene Smith came out of bankruptcy. Three weeks later he and his wife left for a leisurely weekend in New Orleans. Wasn't there spring planting to be done? Not for farmer Smith. "This time of year, I'd normally be tearing my hair out rounding up seed and planters," he says. "But we got into the PIK program, and now we don't have to."

PIK (for Payment in Kind) is the government's new program to pay farmers for not farming by giving them, out of government stockpiles, between 80% and 95% of the grain and cotton they would have produced. This sort of thing has been attempted on and off back to New Deal days to try to whittle down surpluses, but for the Reagan Administration to be doing it is mighty reassuring to Smith. "It's a super boost, a sure sign the government has stepped back in," he says. A lot of other farmers like PIK, too. So far, the USDA says, enough have signed up to take 82 million acres out of production.

Smith, 37, could do with any boost he can find. In the Seventies he was one of the young farmers who expanded their acreage aggressively, betting that land prices would keep rising forever to keep safe their highly leveraged positions. Smith owned 10,000 acres and leased 4,000 more when the 1980 collapse in corn and land prices buried him under $30 million of debt and landed him in Chapter 11.

PIK came along just in time. When he presented his reorganization plan to Bankruptcy Court last January, PIK had not yet been announced, and Smith had to restructure his debt with a projected corn price of around $2 a bushel. Now, thanks to the anticipated reduced supply as a result of PIK, corn has moved up to $3 a bushel, and the Department of Agriculture will give him 360,000 bushels to sell at harvesttime.

So what is Smith doing now that he is back on his feet? You guessed it—he's buying more land. "I hope to have 4,000 more acres by year's end," he says. "I'm banking that Volcker will let the interest rates drop. Then those low land values will just have to go up." If that happens, he can use his replenished equity to buy back his original 10,000 acres, which the mortgage company repossessed and leased back to him. As for Chapter 11, Smith says, "Bankruptcy helped. I see it as a way of keeping costs down."—**Christopher Power**

Indiana farmer Eugene Smith
If 10,000 acres are too many, buy 4,000 more.

Probing matters

In his 20s, Don Kopka was rebuilding and souping up MGs and racing them across frozen Michigan lakes. Now 56, Kopka heads the design team at Ford Motor Co. that develops futuristic prototypes to test engineering ideas. Right now, his baby is the Probe IV, an experimental car embodying Ford's latest aerodynamics research. Ford is counting on improved aerodynamics to boost sales of mid-size cars like its 1983 Thunderbirds and Cougars. Better aerodynamics, Ford says, increases gas mileage and makes its cars more fun to drive.

Ford has spent $12 million on aerodynamics development since 1977, including over $2 million on the Probe series. With the Probe IV, Kopka's team reduced wind resistance to

Don Kopka with the Ford Probe IV
Three inches off the ground, and no fancy fenders.

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Faces
Behind the Figures

a drag coefficient of 0.15, the same as an F-15 fighter jet. Curbside, the Probe stands just 6½ inches above the pavement. At speeds over 40 mph, a computer-operated front air dam automatically lowers the front end until it's barely 3 inches off the road. Front wheels, headlights and windshield wipers are all enclosed, and the radiator rides in back under the trunk. No chrome, no fancy fenders. The Probe's only decoration is a red racing stripe across its nose.

Kopka and his engineers haven't borrowed much from the Probe for 1983 Ford models. The new, sleeker design of the Thunderbirds and Cougars does, however, imitate the Probe's long, sloped front end and its slightly rounded roof. But that's about all for now. Both cars get about 24 mpg, only a 4.3% improvement over the 1982 models.

In a business where it can take 24 months for a modest style change, it will be years before anything more closely resembling the Probe appears in a Ford showroom. Even Kopka doesn't often get a chance to drive it. A big attraction at auto shows, the Probe is usually out on the exhibition circuit.—**Christine Donahue**

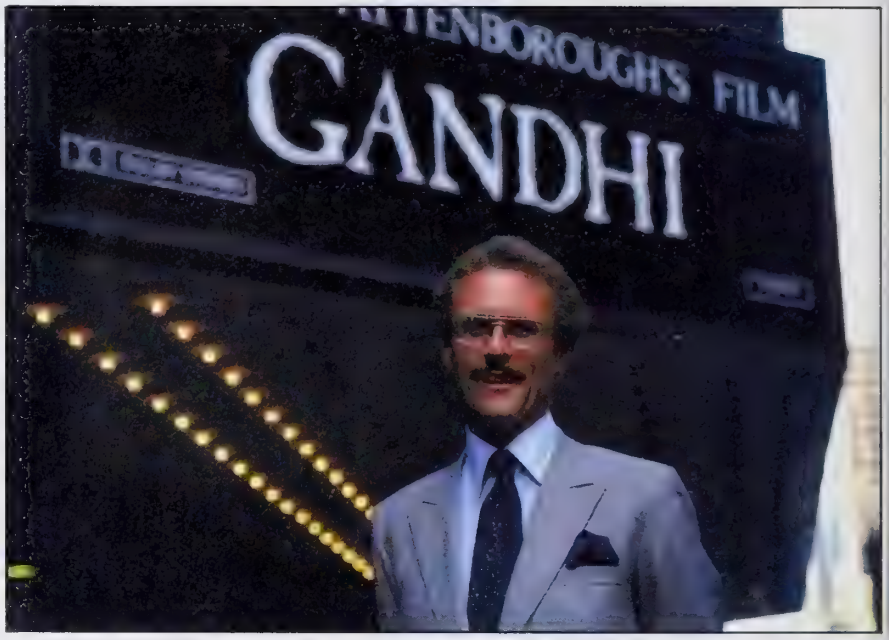
Goldcrest's touch

Back in 1980, John Eberts, chief executive of London's Goldcrest Films & Television Ltd., put up about $750,000 to finance, among other things, a screen test for a British actor who had never shot a movie before. His name: Ben Kingsley. On the basis of that test, Goldcrest decided to finance 60% of the $22 million cost of director Richard Attenborough's movie on the life of Mahatma Gandhi. The rest, as they say, is history. The film won eight Academy Awards last month. Goldcrest and its institutional investors, including the British National Coal Board Pension Fund and the British Post Office Pension Fund, stand to make about $11 million over and above their initial investment.

Every movie backer dreams about a bonanza like that, but in the case of the Canadian-born Eberts, 41, it was hardly a fluke. Three years earlier, he put a modest $30,000 or so into an equally modest film called *Chariots of Fire*—another Oscar winner, it turned out—which returned $1 million, or 3,300%, to his investors. Such acumen has made Goldcrest, a subsidiary of Britain's Pearson Longman publishing house, the largest independent film and television company in Europe since Eberts set it up in 1976.

Eberts, who was then managing director of the London office of Oppenheimer & Co., started out with $500,000 from Pearson Longman (publisher of Penguin Books and the *Financial Times*) and Electra House, a British investment trust manager. Since then, investment capital has grown to $38 million, all from institutional investors who are limited partners. Goldcrest takes a 3% to 4% annual management fee on that $38 million. But Eberts' partners shouldn't mind: An investor who got in three years ago, Eberts says, has more than doubled his money since then.

Eberts applies a sort of "auteur" theory to movie finance. Up to now he has worked only with "reliable" top British directors such as Bill Forsyth, who directed the Goldcrest-backed *Local Hero* with Burt Lancaster; and Alan Parker, director of *Midnight Express*, *Fame* and, most recently, *Pink Floyd—The Wall*, a $9 million Goldcrest production in London. There's also the fact that when Eberts cuts his deals, he prefers to take a percentage of the gross—never mind worrying about what will fall to the theoretical bottom line of net profit. Goldcrest, moreover, controls its own distribution outside the U.S. and sometimes manages to recoup its initial investment before the movie even gets to be shown in the lucrative American market.—**Richard L. Stern**



John Eberts of Goldcrest Films
Taking a cut of the gross, not the "profit."

Look back in profit

For those who like to have their cake and eat it, too, the lookback option sounds ideal. It allows a precious-metals buyer to purchase gold or silver at the lowest price that prevailed over the preceding six-month period. The privilege of looking back, it need hardly be said, does not come cheap. For instance, a conventional six-month option to buy a 100-ounce gold contract recently cost $3,200. A six-month lookback cost $5,000. On the other hand, how many times in life do you get to say, "If only I had bought gold when it was X dollars" and then, by golly, be able to buy it at X?

The unusual option is the brainchild of traders at Mocatta Metals Corp. in New York City, headed by Chairman Henry Jarecki, who also owns more than half the stock. Mocatta traded its first lookback options in January 1982 and still is the only firm offering them.

With trading volume of $25 billion a year, Mocatta is one of the world's largest precious metals traders. Jarecki, 48, came to the firm by a circuitous path. He used to teach psychiatry at Yale. Even then, he was a bug on computers. At Yale he and a colleague used them to help study mental illness. Today he employs 40 computer operators at Mocatta. One thing they do, for example, is spot temporary aberrations that allow arbitrage—

Mocatta Metals' Henry Jarecki
A fraction of a cent may do.

buying silver futures in New York, say, while selling them in London.

Don't ask Jarecki or his machines where the price of gold or silver is headed long term. He doesn't know, or very much care. Jarecki tries to keep the firm's net position in both metals as close to flat as possible at all times, through hedging.

Profits come from thin margins on huge volume. "Our traders are happy to make 10 cents an ounce on a gold trade, and sometimes we will even be happy with 2 cents," says Jarecki. "In silver we will settle for a fraction of a cent." Mocatta is mainly a brokers' broker, though a few individuals can get through the gate. "In late 1979," Jarecki recalls, "we did an 'exchange for physicals' with the Hunts. We supplied them with 25 million ounces of silver and took their futures market position in exchange."

What's next? Mocatta has just started offering overnight options. Reserving 100 ounces of gold costs about $195. That's not too much in the eyes of traders who are afraid of missing developments between 3 p.m. and 8:30 a.m.—**Stanley Angrist**

ROCI II

At 57, Robert Rauschenberg could rest on his laurels if he chose to. The son of a Port Arthur, Tex. utility worker and unaware of art until he went to a museum while on leave from the Army, he is now one of the U.S.' most eminent—and successful—painters. His works, often collages and multimedia "combines," have sold for up to $500,000 and are in the permanent collections of such institutions as the Museum of Modern Art in New York and the Tate Gallery in London.

But the energetic Rauschenberg, who has at times produced five works a day, has no thought of slowing down. He recently launched his most ambitious work yet: a five-year, $3 million project, dubbed the Rauschenberg Overseas Cultural Interchange, or ROCI (pronounced "Rocky," after a pet turtle he has had for 25 years).

ROCI consists of Rauschenberg and several assistants traveling around the world, collaborating on art works with local artists and exhibiting them on the spot. He calls it his contribution to international understanding. "The world needs that now, and art is the most serious and dignified way to approach another culture."

Rauschenberg is taking the world in chunks, starting with the Orient, where he has already visited China, Japan, Thailand and Sri Lanka. In China's Anhui Province he produced 491 collages together with artisans from the world's oldest paper mill. He also made a 100-foot-long composite out of hundreds of photographs he took in China, and in Japan he made ceramics with images silk-screened with glaze into the clay.

The expeditions have their hazards. "Part of the purpose is to head for places that need this, places that are restricted, like Vietnam and Burma," he says. In China he impulsively abandoned his approved schedule and found it took "at least five committees and dozens of phone calls to decide if that was allowed. We never knew when we might be put out of the country."

Financing for the project is also uncertain. Rauschenberg is looking for corporate sponsors, but the rewards of sponsorship hardly seem as clear-cut as the publicity Philip Morris got from giving $3 million to bring the Vatican show to the U.S. Couldn't Rauschenberg fund the project himself, if necessary? No, he says: The art market is too depressed just now. "Companies will help us," he says. "The project is just too interesting to be ignored."—**Laura Saunders**

Artist Robert Rauschenberg and turtle in his Manhattan studio
"Companies will help us. It's just too interesting to be ignored."

Half a century after its heyday, polo is making a comeback with the help of some wealthy corporate patrons. Will they get their money's worth? Well, if you have to ask . . .

Rompin', stompin' pomp and circumstance

By Anne Bagamery

THIS IS THE BEST job of promotion I've ever seen," says Stewart Iglehart, surveying the scene from his grandstand seat at the Palm Beach Polo and Country Club. It is a pretty picture. Bright blue sky, air redolent of fine perfume and horse manure, expanses of green fields, and—somewhere in the crowd—Ursula Andress watching eight of the world's best polo players battle it out for the Winston Guest Memorial Challenge Cup. But Iglehart, one of polo's grand old men who rode with Guest himself in the 1930s, is faintly worried about what's happening here at the $100,000 Piaget World Cup Championship: "All this hoopla—it's great promotion, but I'm not convinced it's good for the sport."

In his box 50 yards away, William T. Ylvisaker harbors no such doubts. Ylvisaker, chairman of Gould Inc., founded the Palm Beach club in 1978 on 1,650 acres of swampland in Wellington, a working-class community 18 miles inland. He has spent the past five years bringing polo out of its post-World War II doldrums by enlisting companies like Rolex, Cartier and Coca-Cola Bottling of Miami as sponsors. (In the meantime, his multimillion-dollar investment has skyrocketed, as have property values throughout Wellington.)

"The more people who see polo, the more will play, and that has to be good for the game," says Ylvisaker, himself a top amateur player. "We could change the rules, make it easier to televise—everybody could enjoy the game. I'll sell polo to anyone who wants to buy it."

"There is no way in hell to make money in this sport," smiles Norman Brinker, chairman of Pillsbury's Burger King division. Brinker, 51, started playing 20 years ago with farm horses and borrowed tack. Today he is one of the nation's top amateur players, with a condo at the Palm Beach Club and ten ponies stabled outside Dallas at the Willow Bend Polo, Hunt and Tennis Club—which he owns. If polo is such a moneyloser, why the smile? "I'm hooked," he says. "It's a disease. The only cure is poverty. And even that wouldn't stop me."

If there is anything to be gleaned from these diverse views of polo in the Eighties, it is that the centuries-old sport of kings may finally have something to offer the common man. Polo, easily the most expensive sport and also one of the more dangerous, is making a comeback, for players, spectators and sponsors. Last year the U.S. Polo Association awarded perfect ten-goal ratings to two Americans, Tommy Wayman and Memo Gracida—the first since 1951. Low-goal polo—short games played on smaller fields—and women's teams are catching on in outposts like Sugar Bush, Vt. and Unadilla, N.Y. New clubs—like Retama in San Antonio, built by oilman Steve Gose—are springing up to hold World Cup matches and encourage crowds.

The Piaget Cup, polo's richest prize
Polo reaches "the right people."

Personal Affairs

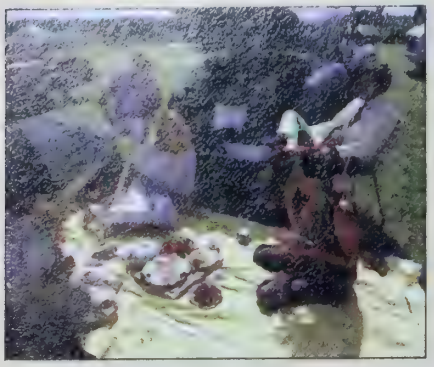
Edited by William G. Flanagan

Of course, this isn't the first time events and some enterprising individuals have threatened to turn polo into a spectator sport for hoi polloi. In the 1930s George (Pete) Bostwick filled the stands at Meadow Brook on Long Island with $1-admission "Polo for the Public" days. And it isn't the first time bluebloods have admitted parvenus: Cecil Smith, considered by some the greatest living player, was the son of a San Antonio rancher.

What makes polo's latest resurgence different is that it has been orchestrated by corporate, not family, money. With companies willing to pay anywhere from $25,000 to $250,000 in team or tournament sponsorship to place their names before the wealthy polo faithful, it has become a simple trick to put up a tournament and attract world-class players. Even the season—traditionally winter and spring—has been

World Cup play at Palm Beach
Ah, but will the sport be vulgarized?

Personal Affairs



Tailgating, Palm Beach style
Polo isn't for bowling fans, yet.

stretched. This fall a new series, the "Crown Jewels of Polo," will kick off in Houston and Dallas. Tournament sponsors are two European-based jewelry companies, with four new-to-polo team sponsors—including a car company and a bank. "Through polo," says Posey Parker, a San Antonio promoter who put the package together, "companies know they can reach the right people."

What's happening to polo these days, then, is similar to what happened to tennis in the Seventies. Polo is even picking up some tennis sponsors: Prudential-Bache, which lost World Championship Tennis to Mercedes-Benz this year, did a World Cup polo team instead. But unlike tennis, which except for Wimbledon was never especially social, polo has two things to sell—the excitement of the game and the allure of the Beautiful People. Or, as the radio ads for Palm Beach Polo put it, "Rompin', stompin' pomp and circumstance."

There was plenty of both at the finals of the Piaget World Cup last month in Palm Beach. Even though it was two weeks past the end of the winter social season, an international crowd of Old Guard, athletes, minor nobility and celebrities came out Saturday afternoon to see the Boehm team, sponsored by porcelain heiress Helen Boehm, win a consolation match in honor of the late Winston Guest. After dancing until midnight at the Piaget Ball, everyone except Andress turned up 12 hours later in polo finery—blazers and flannels for men, silk dresses and picture hats for women—to sip mimosas, munch lobster salad and wince as the team led by England's popular Hipwood brothers bested hometown favorites White Birch/Abercrombie & Kent, 10-8.

Buffet lunch at the Palm Beach Polo and Country Club
From bluebloods to parvenus, something for everyone.

Most amateur players still tend to be to the manner born, but most World Cup players are professionals—that is, they manage to support themselves playing polo, with a lot of help from corporate friends. Since it costs $25,000 these days for horseflesh alone (at least six quality ponies), with yearly maintenance another $30,000 to $40,000, players can't survive on their meager $10,000 cuts of a World Cup purse. So they strike deals with the sponsors: expenses, plus an agreement to buy the six horses they will ride in competition for an outrageous markup—say, 400%. A publicly traded sponsor might find that hard to justify, but a privately owned one like Boehm or Piaget merely accepts it as the price of having high-goal players carry its colors. Also, there's a chance a greater fool will pay an even higher

The corporate sponsor in evidence
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Personal Affairs

premium to own the pony ridden in World Cup play.

Such deals are already disappearing as polo develops like any other professional sport, with salaried players and more or less permanent sponsors. True egalitarianism, however, is a long way off. "Anyone who thinks polo is a snooty sport," says Allan Scherer, Palm Beach club vice president, "should go down to the stables and actually see the players putting bandages on their ponies' legs themselves. I mean, that's pretty down-to-earth." And that's comforting to traditionalists, who would like to leave polo just the way it is.

A primer on polo

"Bad polo," says George Haas, amateur player and president of New York's Haas Financial Corp., "is the worst thing in the world." Like a true fanatic, Haas is overstating the case. But even world-class polo can be confusing and therefore boring if you don't know what to watch for. Herewith, a primer and some hints to help you get inside the sport of kings.

Polo is played—indoors and outdoors—between four-person teams on a field the size of 7½ football grids—300 yards long by 160 yards wide. Goalposts at each end of the field are 8 yards apart. A game is divided into six 7-minute periods, or chukkers, with players changing to a fresh horse after each chukker. (Though they are commonly called ponies, the horses are full-size Thoroughbreds.)

The object of the game is to score goals by knocking the 3-inch willow or bamboo-root ball between the posts with a wooden or aluminum mallet. To equalize weather and field conditions, teams change ends after each goal. In addition, polo associations assign each player a handicap of from –1 to 10 goals, based not on how many goals the player is likely to score but on experience and frequency of play. (The system is stringent: Less than 10% of the world's polo players are rated above three goals.) Team members' ratings are totaled, and the higher-rated team then spots the lower-rated team the difference in their handicaps—similar to, say, giving points in a football wager or spotting strokes in golf. (For example, a 33-goal team would have to beat a 26-goal team by at least 8 goals.)

Polo is sometimes described as hockey on horseback because of the amount of stick- and body-checking allowed. Hooking mallets, bumping into another player from behind and banking a shot off a pony are all perfectly legal. Two common fouls—for which the other team receives a free shot on goal—are "crossing" a player's clear path to the ball and "abusing the pony" by using it to block a shot.

You know you're watching good polo when you see long downfield dribbles and "air shots"—players picking up a pass in midair. Both are extremely difficult to execute from astride a horse moving at 30 miles per hour. You know you're watching bad polo when players seem to make an inordinate number of flubs—topping the ball or missing it altogether. Also—the example of Prince Charles notwithstanding—if players start falling off their ponies. Good polo is graceful; bad polo looks silly.

Players in ready position—with mallets toward none
Watch for long dribbles, air shots and no spills.

A polo tradition is inviting spectators onto the field at halftime—between the third and fourth chukkers—to stomp divots left by the horses' hooves. This is usually more recreational than helpful: Most divots occur in front of the goals, but most spectators stomp at midfield. Sometimes at the end of a match trophies are awarded to the best player and best pony, as well as to the winning team. But if you want to pay a player a high compliment, tell him he or his horse played "with heart"—that is, flat-out and selflessly. Polo purists believe it really is in "how you play the game."

If, despite all this, polo leaves you cold, remember the words of *Philadelphia Story* author Philip Barry: "The prettiest sight in this fine, pretty world is the privileged class enjoying its privileges." Just sit back, sip your gin and tonic, and take in the human parade.—**A.B.**

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Personal Affairs

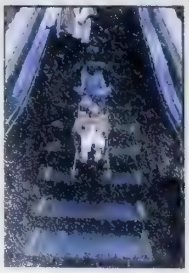
Equality in the nursery

Is your wife pregnant? Congratulations—you may get the chance to spend up to six months all by yourself with your new baby. While many new dads might view that prospect with mixed emotions, the fact is that paternity leaves are becoming the order of the day in some big corporations.

In fact, about 10% of the companies included in The Forbes Market Value 500 list now formally permit male employees to take leaves when their wives give birth. Many others have no formal policy, but will usually honor paternity leave requests rather than risk sex discrimination suits (such as the one currently under way at NBC). And in the public sector, the practice is even more popular: Agencies ranging from the U.S. Treasury Department to the City of Coon Rapids, Minn. allow new dads time off—if they request it, of course.

Levi Strauss, Prudential Insurance, Security Pacific Bank and Johnson & Johnson are only a few of the giant corporations that offer paternity leaves as a matter of formal policy. As with any new fringe, highly competitive industries—including computers, insurance and pharmaceuticals—have been the quickest to adopt it. While the benefit itself is surprisingly widespread, however, many companies say only a handful of males have elected to stay home in their wives' place.

One of those who did is Paul Kempf, a senior programmer analyst at Security Pacific Bank in Los Angeles. Back in August 1981 he took care of his new son, Scott, for ten weeks with his wife. "At first I was afraid of all the responsibilities," comments Kempf, whose wife went back to work before he did. "But only good things happened. Just as I'd hoped, my being home brought us closer together."



Or take Bill Barr, a software development supervisor at Bell Labs, who went on paternity leave when his son, Jamie, was born in 1981. "I didn't want to be the type of father who felt nervous every time he was alone with his infant son," says Barr. "But after 2½ months as a full-time parent my attitude now is, 'Hey, I can take as good care of him as my wife.' "

In most cases, men are offered the same leave traditionally given to women: three to six months off without pay, but with benefits continued and a guarantee of the same job, or a comparable one, to come back to. But some employers, such as New York's Ford Foundation, do even better than that. The Ford Foundation pays men their full salary for up to eight weeks. "Why should we discriminate against men?" asks Bob Tolles, spokesman for the agency. "They are carrying more and more of the household burden, now that so many wives work."

For some two-career couples, paternity leaves simply make better sense financially or careerwise. For example, Tom Berggren, an associate at the San Francisco law firm of Morrison & Foerster, took care of the new baby for two months last summer so that his wife, Lydia, a law student, could work out a summer job with another law firm.

Finances dictated the decision when Vinny Parisi, a New Jersey Bell service representative pictured on this page, stayed home after his daughter, Dana, was born. Parisi's wife, a Bell supervisor, earned about $8,000 a year more than he. "I would have had to go out and get a second job if Kathy had played the traditional role," he says. Parisi enjoyed taking care of his daughter so much that he hopes to take another leave this fall when the couple's second child is born.

Despite the obvious attractions, though, paternity leaves are not for everyone. Some men are too insecure to leave the office for a long stretch, and others cannot afford to.

Peer pressure is another deterrent. Gail Hale, Levi Strauss' manager of research and policy development, says only one executive there has exercised the right so far; generally, management participation is rare, often because of fears of being labeled a corporate lightweight. James Rose, a budget analyst at the Ford Foundation, took one week off when his son was born but hesitated to stay home longer. "Professionals earning large salaries are accustomed to putting their families second and the company first," Rose says. "They worry that paternity leaves might be less than advantageous for their careers."

In addition, businessmen often fear that, tied to the baby carriage, they will miss the challenges and diversions of the office. "When we'd get together with friends," says Kathy Parisi, "I'd be the one talking about business and world events, and Vinny would be discussing the best way to pin a diaper." Bell Labs' Bill Barr chased away those housewife blues by working on his home computer terminal whenever he felt the urge. But lawyer Tom Berggren found he was unable to do the reading and writing he had planned on for his leave. "I never realized just how time-consuming taking care of a baby and the house could be," he says.

It's also a lonely life, especially for house-husbands. "All the mothers would look at me as though I was invading their territory at the grocery or the pediatrician's office," says Parisi. "There's no sense of community," agrees Barr. "You're not just another one of the mothers."

Nor just another father. Vinny Parisi's most embarrassing moment came when he was playing softball and his wife stopped by after work to find out whether he had fed the baby. "Hey, mommy on second base," yelled the umpire, "did you feed your baby yet?" The otherwise easygoing Parisi told his wife never to ask that question again in public—"just feed the baby."

Any adjustment problems in returning to the office? No, most new dads agree: They were ready—and eager—to return, and none reported any negative aftereffects in the office.

Overall, few regret their time at home with the baby. "There are deeper satisfactions than you could ever imagine," says Barr. There are also consolations for those fathers changing diapers when they could be changing corporate policy: first and foremost, knowing that they have a job and office to return to.—**Jill Andresky**

WHEN AMERICAN BUSINESS HITS THE ROAD,
AMERICAN BUSINESS PROFITS AT HILTON.

HILTON

AMERICA'S BUSINESS ADDRESS

Some experts think the EEC's computer antitrust case will collapse just like the Justice Department's. Others think this is a game of politics, not law.

IBM: "Sit up and take notice"

By Richard Greene and Janet Bamford

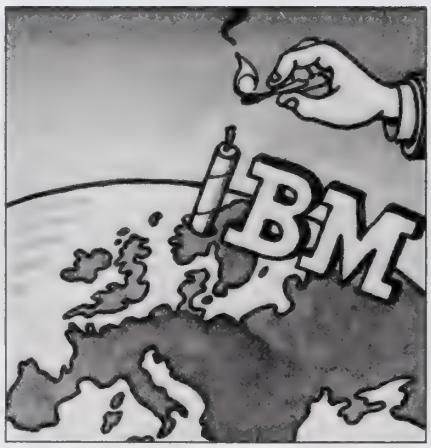
BACK IN 1982, when the Justice Department settled its case against IBM, nearly everyone thought that the computer company's antitrust troubles were over. Wrong. IBM is still facing an antitrust claim brought by the European Economic Community (EEC). After six years of investigation, the action began largely at the behest of companies in the U.S. computer industry. They persuaded the Europeans to follow the U.S. government's lead, and now this second suit is bubbling to a boil.

Many U.S. observers see the EEC litigation in a typically U.S. context, in which IBM will face off against its adversaries and justice will triumph. So they take IBM's victory here as a sign of sure victory abroad. Reality, however, is far more complex.

Despite decades of trying, European nations have been unable to nurture a domestic computer industry that competes across the board with IBM. The opportunity to hit back through the antitrust laws may be irresistible. "Europe is a very politicized place, and the antitrust laws there are like a game of fill-in-the-blanks," says Bear, Stearns' top-notch litigation analyst Calvert Crary. "That makes litigation there ripe for political pressures."

If IBM is overwhelmed by these pressures, the biggest change in its business practices will likely be having to disclose interface information for new computers as soon as they are announced. Currently, the company doesn't give out such information—which could help other firms to duplicate products—until its new machines are shipped. Whether such disclosure will give competitors a real weapon against IBM is debatable. But IBM, justifiably, doesn't want to give any edge to the competition.

The EEC has the authority to collect up to 10% of a company's revenues if it is found guilty of "abusing a dominant position"—breaking antitrust laws. Based on IBM's European revenues, that would be about $600 million, but John Ferry, the British head of the EEC's Brussels-based antitrust division, says he is after IBM's worldwide revenues. Though the EEC has never approved a fine of more than 5%, that still comes to $1.7 billion in this case. Enough, as Ferry explains, "to make IBM sit up and take notice."



The EEC, of course, probably has more bark than bite. When it went after United Brands for antitrust violations in the European banana trade, it fined the company only $1.2 million. But IBM, which says the EEC asked it not to discuss this case, is fighting back hard. Among its lawyers: Cravath, Swaine & Moore, the Wall Street law firm that successfully fought the Justice Department suit, and several of the most prestigious attorneys in Europe.

The U.S. government, embarrassingly, has argued on both sides of this case. "When the EEC decided to bring the IBM complaint, it was encouraged by previous Administrations," recalls an antitrust specialist who practices in Belgium. "Then the political administration changed, and its IBM case ended. Simultaneously, the U.S. intervened in IBM's behalf. I can't think of any situation where your government has lobbied so directly for an American corporation."

Perhaps because of that, Wall Street doesn't seem to be worried. Many analysts aren't following the EEC case, and those who are largely think it will soon be settled painlessly. The Community, in fact, has recently sent IBM a Statement of Objections, to which it sought a reply by the end of April. "The terms of the settlement, as I understand them, are very light," says Tom Crotty of the Gartner Group, which follows IBM closely.

The EEC's Ferry disagrees. "The new Statement of Objections doesn't revise the charges. It asks for remedies," he contends. Some observers, in fact, think that all the heavy lobbying has only made the EEC even more intransigent. "Here IBM was running a campaign showing it was a good EEC citizen, employing some 90,000 Europeans," says Ferry. "But the minute it got into trouble, it called Uncle Sam in. It lost credibility."

There is, however, irony amidst all this uncertainty and rumor. U.S. companies like Memorex and Amdahl, which pushed to get the EEC case going, won't be the biggest winners if IBM loses. European firms won't even get a real boost, since they are too splintered to compete across the board. Instead, the chief beneficiaries are likely to be the Japanese, who can duplicate IBM's key designs even faster if they see them sooner.

To the folks in Toyko, this must be like the old vaudeville routine: "Let's you and him fight." ■

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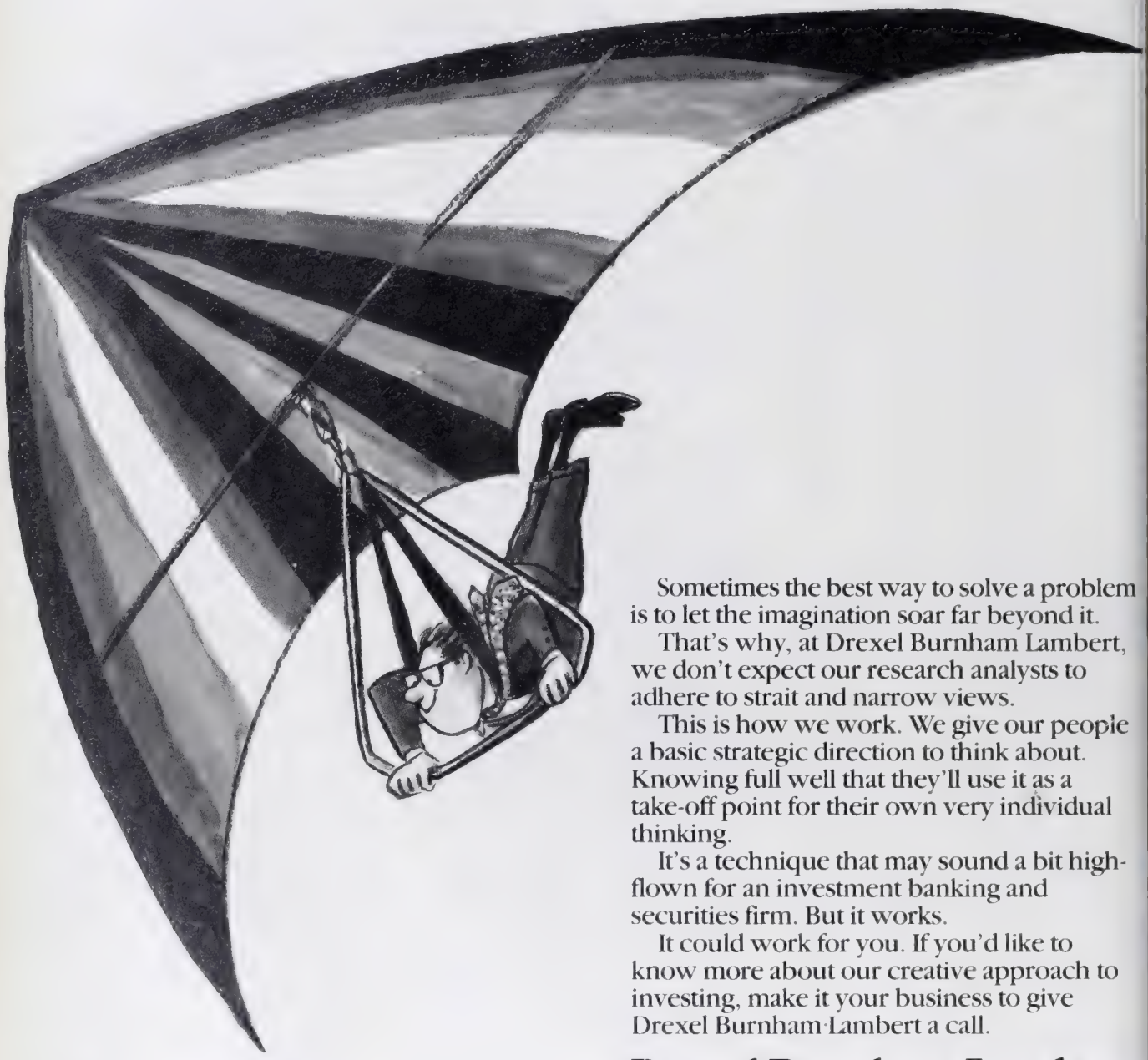

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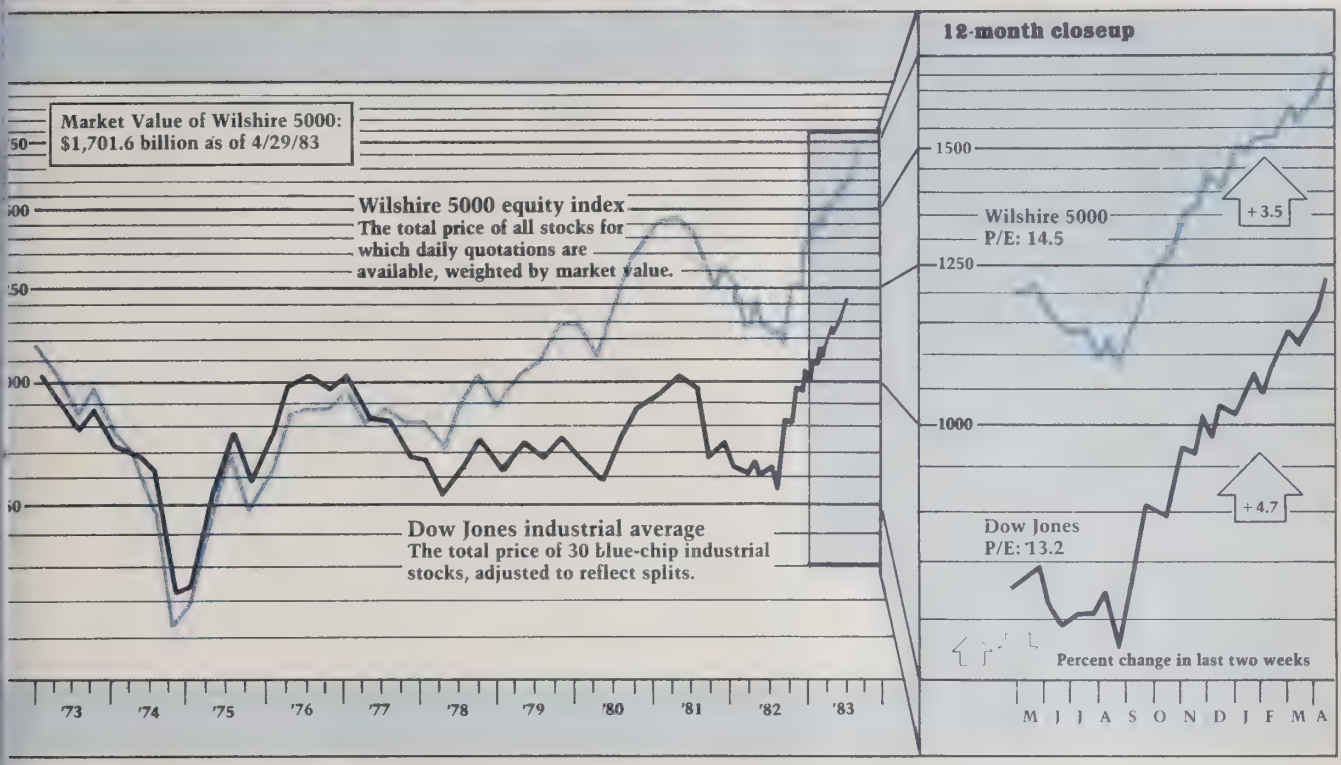
The Forbes/Wilshire 5000 Review



levved up. The market continues its move into unchart-d territory. After flirting with the 1200 level for a number f sessions, the Dow finally closed above this bench-nark—an achievement that early last summer only the nost optimistic of market watchers thought possible. Vhat's more important, of course, is that all other major ndexes also made, and proceeded to break, new records. The 30-stock Dow industrials and the Amex market value ndex each advanced 4.7% over the last two weeks. The trength of the Amex is due, in part, to energy issues. Oils ave been strong performers since mid-March.

The price-to-earnings multiple on the overall market is also performing impressively. The Wilshire index of almost 5,000 securities is now priced at an average 14.5 times earnings. Utilities, banks and energy are perhaps the only sectors where a significant number of companies now trade at less than 7 times earnings. Back in August, the entire market was trading in that range.

There were some encouraging signs in first-quarter profits—especially with the major auto firms—but other earnings announcements still brought plenty of recession-bred disappointments. The real question now: How much higher will investors push the price side of the P/E equation before they demand that earnings catch up?

Close-up On The Equity Markets

Performance of six leading indexes

Percent change	Wilshire 5000	Forbes 500[1]	Dow Jones industrials	NYSE Composite	Amex Market Value Index	NASDAQ Composite
in last 4 weeks	7.3	7.3	2.5	7.1	9.6	8.2
in last 52 weeks	42.8	40.6	44.5	40.5	57.6	58.7

Stock performance based on five key investor yardsticks

Percent change	Company size		Volatility[2]		P/E multiple		Dividend yield		Growth profile[3]		Share price	
	large	small	high	low	over 25	under 5	over 7.5%	none	high	low	over $40	under $4
in last 4 weeks	6.4	9.0	9.0	6.0	8.8	8.4	5.6	8.2	9.1	7.1	6.8	9.6
in last 52 weeks	42.0	100.9	97.1	47.7	70.8	114.2	40.7	109.4	108.7	50.2	54.2	93.5

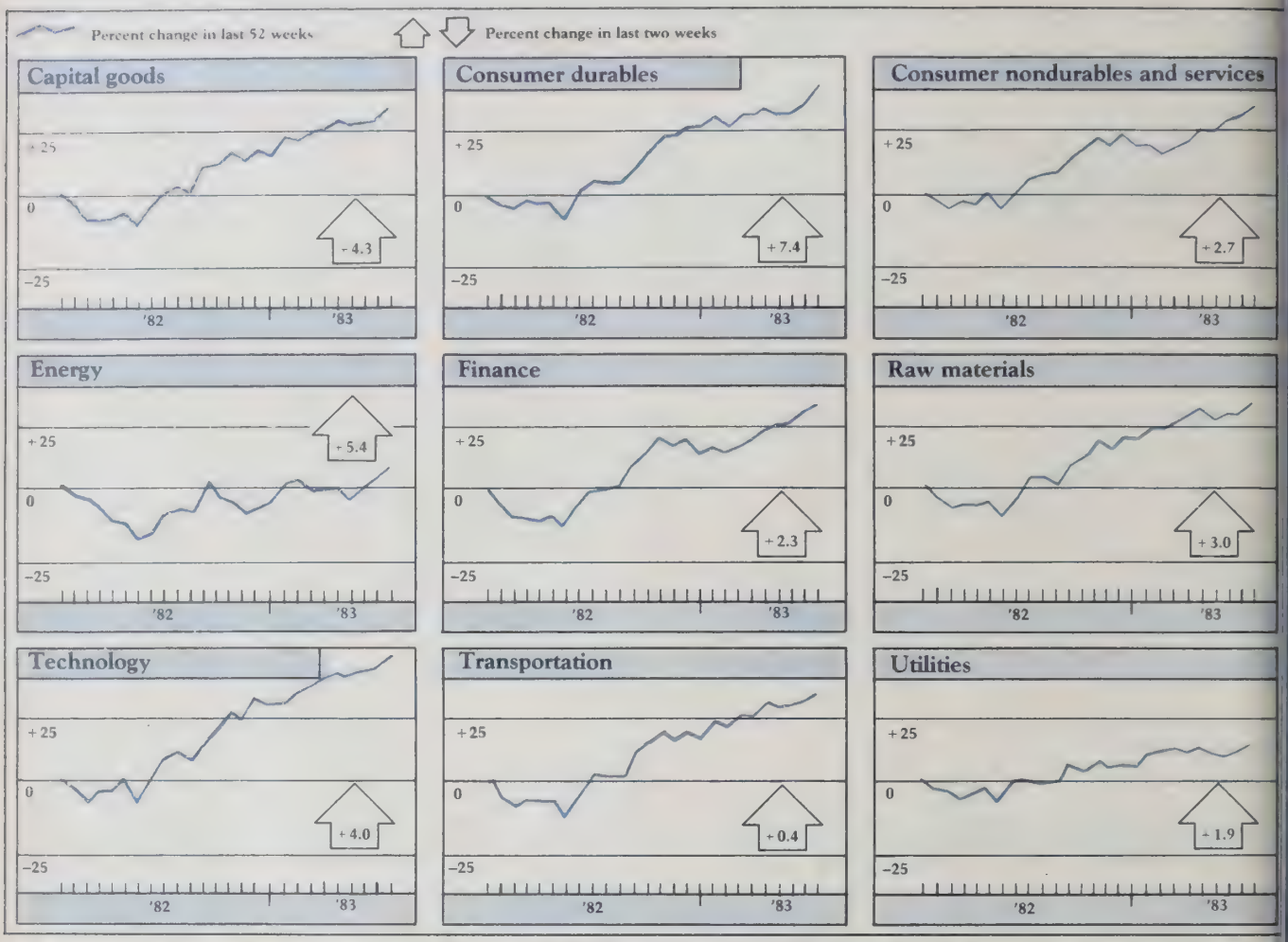
[1] Based on sales.
[2] A stock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations, low-volatility issues are more stable.
[3] A quantitative evaluation of a stock's growth image, determined by Wilshire Associates.

ote: All data for periods ending 4/29/83. Prepared by Wilshire Associates, Santa Monica, Calif.

Where The Action Is

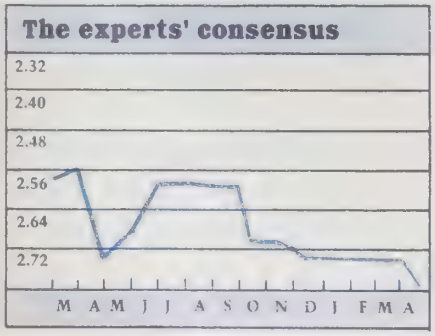
Route 66. Wall Street made a long overdue discovery—the automobile. During the last two weeks all four U.S. automakers hit 52-week highs. Profitable first quarters for GM, Ford and Chrysler surely helped, even though the numbers were boosted by inventory adjustments and income from finance subsidiaries.

Consumer durables led the industry groups with a 7.4% two-week gain. Several major air carriers, meanwhile, reported large losses, and the transportation group eked out only a 0.4% gain. Utilities were also comparatively weak, showing just a 1.9% rise in a market that was otherwise quite strong. Despite tempting yields and P/Es that are often half the market multiple, this group has not peformed well recently.



What The Analysts Think

Detour ahead? Stocks keep rising, but the composite buy/sell opinion of analysts surveyed by Wilshire Associates is now lower than at any time since we began monitoring this data last summer. Utilities, however, are clearly the analysts' current favorites. Do the experts anticipate rising interest rates and a falling market?

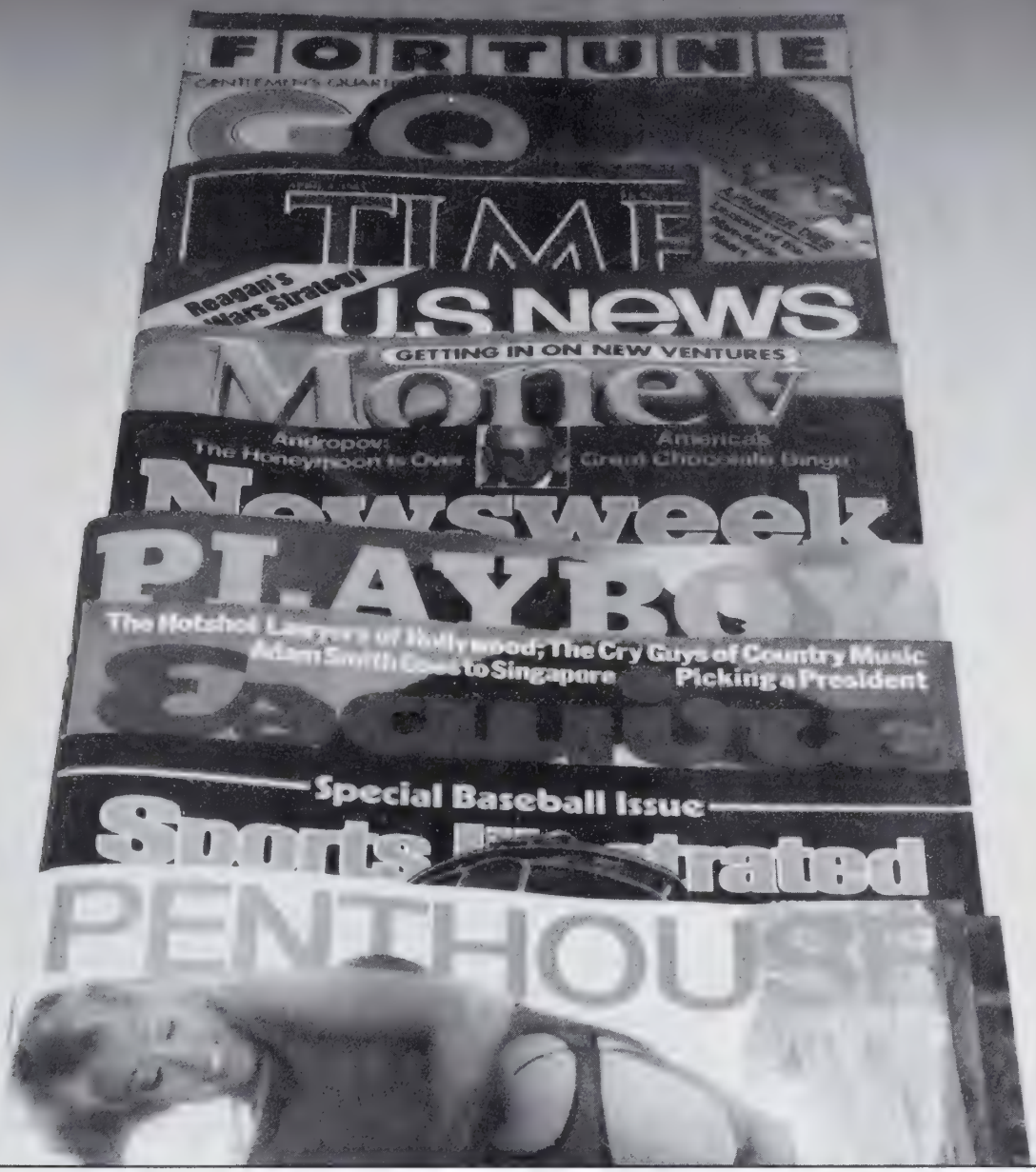


Rank	Sector	Current opinion	Rank 2 weeks ago	Rank 4 weeks ago
1	Utilities	2.62	2	2
2	Energy	2.77	1	1
3	Technology	2.77	3	3
4	Capital goods	2.77	4	4
5	Raw materials	2,79	6	6
6	Finance	2.82	7	7
7	Transportation	2.86	5	5
8	Consumer nondurables	2.87	8	8
9	Consumer durables	2.91	9	9

Opinion ratings are ranked on a scale of 1 (strong buy) to 5 (strong sell). Data reflect the views of 200 institutional analysts. The consensus of opinion graph is the composite rating of 1,200 stocks, while the sector breakdowns correspond to industry groups graphed above. All figures are weighted for market capitalization.

Note: All data for periods ending 4/29/83. Prepared by Wilshire Associates, Santa Monica, Calif

On newsstands Penthouse outsold all of these magazines combined!*



*Publisher's compilation on the most recently ...ed statements by ABC, for ...s ending Dec. 31, 1982 (...to audit). Average issue, copy sales, per paragraph 1

PENTHOUSE

IT'S A BUSINESS DECISION

Funds investing outside the U.S. have missed much of the market's recent gain. Does that mean they will play catch-up soon?

Waiting for the double whammy

By John A. Byrne

THOSE VENTURESOME FOLKS who invest in funds that buy foreign stocks have missed much of the current market rally. As a group these funds show 12-month gains that are less than half those of their domestic counterparts. Until late last year, in fact, most of the funds ranked below carried annual performance declines.

The strong dollar caused much of the problem. Strip away currency losses, for example, and Kemper registered a respectable 12-month return of 14.2% through September 1982, even though its dollar-adjusted performance was –2.7%. That's only half the story: Unfortunately, many foreign equity markets were also weaker than Wall Street for economic reasons. As the adage goes, when the U.S. sneezes, the world catches a cold.

These days, however, the U.S. is performing impressively—and many experts think foreign stock economies could play catch-up. Other markets already appear to have bottomed. Since August, for example, exchanges in Europe, Australia and the Far East are up almost half as much as the U.S. averages. "Once the recovery gets under way, you'll find more upside potential overseas," says John Ford, vice president of Rowe Price-Fleming International.

Currency gains are possible, too. Many experts think the dollar is bound to soften, bringing an extra helping of gains to anyone with an international portfolio. "We now have the potential for a double whammy: the likely decline of the dollar and appreciation in foreign stock markets," says Nicholas Bratt, who manages Scudder International's $80 million portfolio.

The most important foreign market for most funds is Japan, where international investors typically have the greatest single portion of their assets. Among the most bullish at the moment is Ford of Rowe Price-Fleming. His $100 million fund is over 50% invested in Japan, up from 36% just six months ago. Ford favors what he calls "quality, cyclical companies" such as Asahi Glass, Matsushita Electric and Marui, a retailer.

Kemper's Robert Stephens, who manages his fund from Glasgow, is less enthusiastic about Japan. He thinks the growth of trade barriers will hurt Japanese exports and slow economic growth. He also prefers to keep his money out of well-known names such as Fujitsu and Hitachi-Maxell. Instead, fully 10% of Kemper's portfolio is invested in Japanese utilities like Kansai Electric Power. It offers a 5% dividend yield, vs. the 1.5% that's typical in Japan. Kansai and other utilities could benefit handsomely if the yen strengthens, oil prices continue to decline and interest rates fall.

Scudder's Bratt also saves most of his enthusiasm for elsewhere. "Although we think Japan is a good place from a secular point of view," he explains, "we see a stronger cyclical recovery in Europe, which has gone to the dogs for nearly ten years." Bratt is particularly optimistic about Belgium, which introduced a law in late 1981 that gives tax benefits for investing in the stock market. Similar legislation was enacted in France in 1978, he notes, and the market there doubled two years later. At the moment, 6% of Scudder International's portfolio is committed to Belgium, in holdings like E.B.E.S. and Electrobel, both utilities; Delhize, a food retailer; and Banque Bruxelles Lambert.

The Netherlands and Scandinavia are also now showing up in several international portfolios. "The stock markets there had been dull performers for a long time and were very much out of favor," says Stephens. "But buried among the dross are some very interesting nuggets." His glittering finds include Gist-Brocades, a Dutch biotechnology company that has risen 80% in value since September; Novo, Denmark's well-known insulin producer; Astro, a Swedish pharmaceutical concern; and L.M. Ericsson, the telecommunications giant.

Before you pour money into an international fund, however, remember that the optimistic outlook for these investments rests heavily on the strength of the U.S. recovery. If the economy here falters, turnarounds elsewhere could do worse than merely stall. In addition, rising interest rates in the U.S. could keep the dollar strong and eliminate the chance for currency conversion gains. ■

Home is where the action was

These six funds invest entirely outside the U.S. As the numbers indicate, this has produced below-average results in recent months. But portfolios with a foreign accent will benefit if the dollar weakens and if overseas economies emulate the U.S.' recovery.

Fund	Assets (millions)	Performance: 5-year (to Mar '83)	Performance: 1-year (to Mar '83)	Performance: first-quarter
Great Pacific Fund	$ 13.9	41.5%	11.9%	3.8%
Kemper International	26.5	—	25.1	7.7
Merrill Lynch Pacific	40.0	72.8	21.5	0.8
Scudder International	79.1	95.6	31.5	12.8
T Rowe Price International	101.0	—	25.9	4.9
Transatlantic Fund	27.8	65.7	20.4	14.3
Composite of international funds		68.9	22.7	7.4
Composite of domestic funds		172.2	48.9	11.4

Source: Lipper Analytical Services

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April 25, 1983

Statistical Spotlight

In good times and bad, someone has to take away the garbage. If you can do it better and cheaper, you're a service company.

New wave?

By Steve Kichen and Paul Bornstein

GRANTED THAT the line between manufacturing and service companies has always been a little fuzzy, the trend has nevertheless been clear. Most people are likely to have increasing amounts of time and disposable income to consume the services of others—whether it be restaurants, movies, physical fitness or recreation centers or investment management. The question is, how's an aggressive investor to play the trend? Where are the services growth stocks of tomorrow to be found?

Recall how Ray Kroc took the old hamburger and offered a low-priced, standardized product that put McDonald's on the map of almost every major town in America? Too late. With annual sales of $2.8 billion and a McDonald's, Burger King or Wendy's already occupying the choicest real estate, it is unlikely that McDonald's will ever be able to repeat its earlier growth rate. Now McDonald's is fine, if it's blue chips you want.

But something like Chi-Chi's—one of 11 food companies in the table below—could still have its best years ahead of it. Chi-Chi's operates family-style Mexican restaurants. There were only four stores just four years ago. Now there are 94, compared with McDonald's more than 5,900—and that's in the U.S. alone. Maybe management can continue to provide the right strategy for growth, maybe not. According to analyst Ronald Strauss of William Blair, Chi-Chi's growth will slow somewhat, but it will still be well over 20% for the next few years. If you're hunting for the spectacular successes of tomorrow, those kinds of numbers sound appealing.

We culled the databases at Los Angeles' William O'Neil & Co. for a list of possible high-growth candidates in the services sector. We looked for companies that look today like McDonald's did in, say, 1965. We wanted revenues not yet $200 million; good debt-to-equity ratios, earnings trends, growth rates; and good returns on equity. In addition to the expected crop of fast-food servers, we found several interesting firms.

Take Solon Automated Services, which runs coin-operated laundries in apartment buildings. Or Laidlaw Industries, which collects and disposes of solid waste.

The earnings of most of the listed companies have greatly outperformed the S&P's 500 for the past five years *(see table)*. Eight of these companies outgrew it 1,000% or more. (Keep in

Selective services

Like any company, once a service firm grows very large, it becomes harder to expand earnings at a high rate. These 61 firms—all with sales under $200 million—should still be a long way from topping out.

Exch	Company/business	Recent price	Latest —12-months— EPS	P/E	Earnings growth relative to S&P's 500	—Return on equity— 5-year average	latest 12 months	Sales* (mil)	Debt/ equity
o	**ACMAT Corp**/building contractor	9	$0.78	11.5	1,007%	22%	26%	$18.9	55%
n	**Advest Group**/securities brokerage	23⅞	1.55	15.4	255	22	18	88.3	14
o	**AFA Protective Sys**/fire, theft protection	37	4.31	8.6	550	NA	15	17.4	23
o	**Amer Recreation Ctrs**/bowling centers	16	1.48	10.8	255	19	17	19.4	59
o	**Aviation Group**/airfreight services	25¼	1.11	22.7	NA	NA	25	23.9	48
a	**BDM Intl**/tech svcs for Defense Dept	61	2.06	29.6	268	19	18	118.3	0
a	**Beefsteak Charlie's**/restaurants	7⅝	0.84	9.1	523	18	23	100.0	48
a	**Bowl America**/bowling centers	9⅛	1.18	7.7	121	17	17	16.7	28
o	**CERBERONICS**/eng svcs for Defense Dept	22¾	1.20	19.0	711	23	35	18.9	0
o	**Chi-Chi's**/Mex-style restaurants	24⅜	0.56	43.5	1,517	10	32	76.4	96
o	**Comarco**/engineering svcs	15½	0.46	33.7	1,141	NA	16	16.4	82
o	**Comdata Network**/money transfer svcs	40½	0.78	51.9	671	42	40	26.5	4
o	**Commonwealth Theaters**/movie theaters	24	2.38	10.1	174	17	17	79.2	63
o	**Commun Inds**/communication svcs	32¾	1.05	31.2	322	19	19	61.5	4
n	**Com Psychiatric Ctrs**/psychiatric hosps	32⅜	1.17	27.7	416	22	25	126.1	50
o	**Comprehensive Care**/health care svcs	29	1.00	29.0	631	22	20	83.6	9
o	**Computer Factory**/computer stores	11¾	0.32	36.7	1,221	NA	24	13.3	0
a	**Countrywide Credit Inds**/first mortgage loans	10¼	0.43	23.8	255	35	17	13.2	NA
o	**CP Rehab**/health care svcs	18½	0.22	84.1	752	26	18	6.3	10
o	**Cracker Brl Old Cty St**/restaurants, gift shops	26	1.19	21.8	255	21	20	40.2	81

*Latest 12 months. NA: Not available. NM: Not meaningful. a: American Stock Exchange n: New York Stock Exchange. o: over-the-counter.

Source: William O'Neil & Co.

mind that, over time, such growth rates must slow down.)

Nutri/System leads our list with a relative growth rate of 1,611%. Its popular weight-loss centers multiplied from 111 in July 1978 to 660 in January 1983. Analyst Donald Heeter of Tucker Anthony advises, "This company won't see the growth that it has averaged over the past five years, but over the next three years the figure could average 20% to 25%." Since 1981 Nutri/System has acquired Fox Morris, a personnel agency, Gloria Marshall Figure Salons and Nutrient Cosmetics, but it has yet to show that it can wring the same levels of growth from these new businesses.

Comdata Network is on the leading edge of electronic funds transfer, with an especially popular product: instant cash. The company got started by providing truckers with quick cash while they are on the road, then expanded into the casino market, where it services patrons who have credit cards but a sudden shortage of chips. Comdata's latest service is a product called Comvoy, which lets truckers tap into computers to look for a paying load for the return trip.

As the postwar baby boom ages, health care services will come into their own. Comprehensive Care, for example, owns and operates 11 hospitals for alcoholism and emotional problems and also has 94 contract programs, mainly for alcoholism, in other hospitals. The firm made its name by treating such personalities as Billy Carter and Betty Ford. Jules Marx, at Laidlaw, Adams, feels Comprehensive Care still has a lot of opportunities: "The company generated some $75 million in cash over the past three years and now has the ability to add more freestanding hospitals."

Since fixed costs are usually much lower in services than in relatively capital-intensive manufacturing, service companies are less vulnerable to cyclical economic swings. Yet they still can take advantage of economies of scale, product standardization and centralized management and training. But only a select few will achieve as prosperous a middle age as McDonald's. Remember Wesson's Hamburgers, Carrols Hamburgers and Gino's? How about Itel, once a star in the computer-leasing field, now struggling to get out of Chapter 11? Seventeen of the following companies sell at a dicey P/E of 29 or more—at least 2 times higher than the Wilshire.

As you shop, look for well-managed companies with good products, strong brand identification and an ability to adjust to shifting markets. Anything dependent on what might be just a passing fad—like the marriage of pizza pies and video games—could quickly pass from the scene. ■

Exch	Company/business	Recent price	Latest —12-months— EPS	Latest —12-months— P/E	Earnings growth relative to S&P's 500	—Return on equity— 5-year average	—Return on equity— latest 12 months	Sales* (mil)	Debt/ equity
o	**Discount Corp of NY**/financial services	83	$23.26	3.6	NA	40%	47%	$194.0	16%
n	**Dreyfus Corp**/manages mutual funds	54	6.50	8.3	966%	38	59	122.3	0
o	**Dunkin' Donuts**/donut shops	21⅝	1.46	14.8	242	18	19	77.6	81
o	**Evaluation Resrch**/eng svcs for Defense Dept	10½	0.44	23.9	322	25	24	17.3	55
a	**Geothermal Res Intl**/leases trans eq; geothm	11½	1.79	6.4	NA	19	28	17.7	4
o	**Godfather's Pizza**/pizza restaurants	21⅝	0.65	33.3	1,503	60	83	40.2	76
o	**Grey Advertising**/advertising	89	11.22	7.9	121	22	21	142.1	2
a	**Gross Telecasting**/broadcasting	51⅝	4.26	12.1	134	17	18	14.1	0
n	**Integrated Resources**/financial services	35⅜	2.42	14.6	644	14	18	176.0	86
o	**IRT Corp**/R&D for Defense Dept	7¼	0.26	27.9	322	4	18	13.3	56
o	**Kelly Johnston Ent**/Mex-style restaurants	14⅜	0.43	33.4	1,382	24	19	36.2	50
o	**Laidlaw Inds**/waste disposal svcs	21	0.92	22.8	309	17	18	74.6	38
o	**LCS Inds**/direct mail, mktg svcs	9½	0.53	17.9	NA	8	26	9.4	45
o	**Lil' Champ Food Stores**/convenience stores	22½	1.54	14.6	255	15	17	60.6	24
o	**LIN Broadcasting**/broadcasting	36½	1.85	19.7	242	19	19	88.4	97
n	**Lomas & Nettleton Fnl**/mortgage banking	54⅞	3.43	16.0	322	18	19	166.4	51
n	**Luby's Cafeterias**/cafeterias	30⅛	1.43	21.1	282	22	23	135.5	9
o	**Nuclear Support Svcs**/tech svcs for utilities	12¼	0.93	13.2	1,423	41	34	18.0	0
n	**Nutri/System**/weight-loss centers	25¼	2.15	11.7	1,611	54	66	167.5	0
o	**Payco American**/collection agency	14½	0.97	14.9	309	14	21	38.3	0
o	**Perceptronics**/R&D for US government	13¾	0.25	55.0	NA	13	33	5.5	2
o	**Pioneer Group**/undrwrts, distrib mut funds	40½	1.93	21.0	591	68	61	15.1	0
o	**Pizza Ventures**/Godfather's Pizza franchises	31	0.71	43.7	523	33	27	19.6	11
o	**Quotron Systems**/financial information svcs	53½	1.05	51.0	403	20	19	120.9	1
o	**RCM Technologies**/tech supt aerospace ind	¾	0.04	18.8	NA	4	15	6.7	1
o	**Rehab Hosp Svcs**/health care svcs	13¼	0.41	32.3	NA	20	22	8.5	87
n	**Rollins Envir Svcs**/pollution control svcs	16¼	0.62	26.2	NA	4	19	43.8	66
o	**Ryan's Family Steak House**/restaurants	37¼	0.71	52.5	886	32	41	11.8	92
o	**Safecard Services**/credit card loss svcs	22	0.79	27.8	523	26	33	47.1	0
o	**Sandwich Chef**/restaurants	15½	0.76	20.4	NA	NA	26	18.3	14
o	**Seven Oaks Intl**/coupon redemptions	13	0.60	21.7	81	29	15	16.7	3
o	**Shop & Go**/convenience stores	9¼	0.93	9.9	362	23	25	193.8	16
o	**Snelling & Snelling**/employment centers	6½	1.12	5.8	483	20	22	21.8	47
o	**Solon Automated Svcs**/coin-op laundries	29	2.65	10.9	148	17	18	99.3	52
o	**Synergistic Com Grp**/mktg & ad research, svcs	6⅞	0.81	8.5	577	19	42	17.1	79
o	**Taco Viva**/Mex-style fast food	14¾	0.58	25.4	242	NA	NA	14.4	NA
o	**Telecredit Inc**/credit authorizing svcs	28	0.97	28.9	470	13	15	60.5	3
a	**Telesphere Intl**/hotel phone accounting	15⅞	0.14	NM	NA	NA	30	18.7	1
o	**United Television**/TV stations	13	0.80	16.3	NA	22	30	43.1	16
a	**URS Corp**/eng, architectural svcs	12¾	1.56	8.2	148	16	20	94.2	53
o	**US Health Care Sys**/health care svcs	44	0.44	NM	NA	NA	NA	59.8	NA

*Latest 12 months. NA: Not available. NM: Not meaningful. a: American Stock Exchange. n: New York Stock Exchange. o: over-the-counter.

Source: William O'Neil & Co.

Douglas Casey's investment advice is improving. Maybe that's why his new book isn't selling as well as his old one did.

Creeping respectability

By John R. Dorfman

IS BESTSELLING investment guru Douglas Casey taking on establishment tendencies? The recommended $100,000 portfolio in his latest book, *Strategic Investing*, is diversified almost to the point of conventionality: 40% stocks, 20% money funds, 10% commodities, 10% gold coins, 10% Swiss francs, 5% silver coins.

The remaining 5% goes into what Casey calls a "hoarding program." That maintains the author's credentials as a doom-and-gloomer. He still believes, as he did in his million-copy 1980 bestseller, *Crisis Investing*, that the country is heading for an inflationary depression—something along the general lines of Germany in the early 1920s.

Casey's new model portfolio hasn't done badly so far *(see table)*. FORBES calculates that $100,000 invested in it a year ago would now be worth about $154,530. This kind of performance is a far sight better than an investor would have achieved by following the advice in *Crisis Investing* the week it hit the bestseller list. Last May we estimated that the recommendations found in Casey's earlier book could have run $100,000 down to $58,263 in about 18 months.

In rebuttal, Casey cites the lag between the time he wrote *Crisis Investing* and the time it hit the bestseller list. During that period, gold—then one of his favorite investments—had a big surge. The people who bought his book when it was popular should have discounted the "buy gold" advice, Casey claims.

If at first you don't succeed . . .

The reasoning behind Douglas Casey's investment recommendations is, to say the least, unusual. He likes stocks, for example, not because he thinks the economic climate is getting better, but because he thinks speculative opportunities will abound in a highly inflationary and unstable environment. However conceived, the recommended portfolio in *Strategic Investing* is up 54.5% over the past 12 months. That's better than the 33.5% gain of the Dow industrials, and much better than Casey did with the recommendations in his previous book, *Crisis Investing*.

Asset	Initial investment April 1982	Recent value April 1983
Hoarding program	$ 5,000	$ 5,172
Gold coins	10,000	12,271
Silver coins	5,000	6,424
Money funds	20,000	22,350
Swiss francs	10,000	9,585
Blue chip stocks	8,000	10,679
Utility stocks	8,000	9,053
Penny mines	8,000	40,023
Gambling stocks	8,000	10,025
South African golds	8,000	18,482
Commodities	10,000	10,466
	$100,000	$154,530

Investment guru Douglas Casey ***For widows and orphans, penny mining stocks.***

In the more recent book, however Casey still recommends gold and silver, but as a smaller part of his total portfolio. Now they're "stores of value" rather than attractive speculations. Still, anyone who fears that Casey has gone establishment need only dip into his text to be reassured.

On taxes: "There is . . . no more necessity for government to supply roads, fire protection and schools than for it to provide autos, restaurant chains and television programming . . . Tax compliance is about as voluntary as the 'contribution' you make to a mugger."

On penny mining stocks: "Can I be saying that widows and orphans should buy penny mining shares? Well, I am, and they should. Of course, this prospect will send shivers down the spines of regulators, bank trust officers and conventional advisers. But that's their problem."

On commodities: "These have always been viewed as nothing more than a legal gambling casino in the past. . . . However, I have outlined the techniques and commodities that will make it possible to multiply even a small amount of capital ten for one with low risk."

Somehow, even though we looked hard we never were able to find the magic advice that gives a tenfold return with little risk. Instead, we found comments to the effect that there are several valid approaches to commodity speculation, and that the important thing is to have a plan and stick with it.

Having edged a bit toward the center of the spectrum, will Casey still appeal to hundreds of thousands of book buyers? Simon & Schuster won't say how many copies of *Strategic Investing* have been sold. It was on the *New York Times* bestseller list for 6 weeks, compared with 34 weeks for *Crisis Investing*. The paperback of the newer work, issued in February, hasn't cracked the bestseller list yet.

All this may be evidence to support a veteran literary agent's evaluation: "Responsible investment books never are bestsellers." Watch out, Douglas Casey. Get any more responsible and your next book may sell only 30,000 copies. ■

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R GRUPPO RIZZOLI-CORRIERE DELLA SERA

Made buckets of money in the market and worried about when to take your gains? Lots of folks have systems to help you decide—but not one of them works.

All coins have two sides

By William Baldwin

GO TO A COCKTAIL party these days and everyone is talking about Wall Street. No wonder. Over the past nine months even the greenest stock pickers probably racked up spectacular profits. But now, while the latecomers are lapping up stories about hard-to-get new issues and penny-a-share technology companies, experienced investors are worrying about a more relevant problem: when to sell and take some of those fancy gains.

That's why there is an unusual amount of discussion about hedging strategies, can't-miss systems that seem to offer the rewards of investing with none of its pains. Some portfolio managers buy put options—rights to sell stock at a guaranteed price—to protect their positions. Others use the futures markets to shield bond portfolios against rising interest rates. Lots of small investors, meanwhile, probably follow less sophisticated rules. "Whenever a stock doubles, always sell half your position," so the old-timers advised.

Unfortunately, none of this solves the basic problem of investing—how to know whether a security is fairly priced. Consider the "sell discipline" that mandates bailing out of a stock that has dropped, say, 15% from its purchase price or from a subsequent high. This is supposed to keep you in a bull market while protecting you from the risk of giving up all that has been gained so far. Coupled with a rule of holding on during up markets until a minimum gain of, say, 30% has been achieved, this system seems to promise an overall win.

What's the catch? "All your profits will be 30% and your losses 15%," says Tony Estep, a market strategist at Salomon Brothers. "But the ratio won't be 50/50. No chip management scheme will change the odds on a roulette wheel." Think what this sell discipline would have done to an investor who went into the market at the beginning of last year and was forced out around midsummer. In most cases he would have taken dozens of 15% losses and practically no 30% gains. Some system.

Still, in an age of computers, people assume that someone somewhere has a black box that beats the market. Prudential-Bache answered this yearning when it offered its Option Growth Fund, advertised as employing complex hedging techniques to make money in up, down and sideways markets. The fund drew $80 million, one-third more than expected, by the time it began operating in April. Money rolled in despite a hefty 1% management fee. Doing the impossible, after all, doesn't come cheap.

"We call it the fund for all seasons," says Courtney Bellaire, the fund's portfolio manager. "Our goal is to outperform the market by 5% over the long term." And how will the Option Growth Fund do that? The secret is set forth neatly in the prospectus, where a chart lists the Pru's strategy as owning stocks in bull markets and going heavily into puts in bear markets. A nice idea, that. But the prospectus neglects to say how the fund manager will know in advance which way the market is headed.

However, Pru-Bache's Bellaire says she will use "protective puts." That, for example, means buying IBM stock and simultaneously buying a put on those same shares. If IBM takes off, an investor gets the same capital gain as one who merely buys the stock. If IBM collapses, the loss on the stock is offset by the gain on the put.

Could this really be the heads-only coin that it seems to be? Common sense dictates that the put sellers give away nothing. So, the cost of these sell options ought to equal the advantage of erasing losses in a stock portfolio. Experience, in fact, dictates an even grimmer conclusion. The cost of the options will *exceed* the benefit from erasing stock losses.

The reason for this contrary result, says Massachusetts Institute of Tech

Sometimes the odds aren't even

"Cut your losses, let your profits run." This old saw is usually offered up as a trick for improving the odds on Wall Street. It can't do that. But folklore does sometimes help investors for an entirely different reason: tax deductions.

The IRS pays attention to stock gains and losses only when positions are closed out. Thus it makes sense to sell losers rather than winners, other things being equal. If you have held securities for less than a year, net losses are deductible dollar-for-dollar against other income, up to a maximum of $3,000 each year. Stocks held more than a year are less valuable as writeoffs, since it takes $2 of long-term loss to generate $1 of deduction. Example: The $20,000 you put into AT&T has shrunk to $18,000 after 11½ months. Sell immediately and you get a $2,000 deduction. Wait a bit longer and the deduction is only $1,000.

Tax strategies for investors with lots of positions are, of course, more complicated. But behind all of them is this caveat: Don't let the tax tail wag the dog. There's no sense, for example, selling a losing stock in December of a bear year. Everyone else is trying to do the same, and the price you receive will be correspondingly lousy.

Beyond that maximum $3,000 deduction for net capital losses, the best tax strategy is often just buy and hold. Not only will eventual gains be taxed at lower long-term rates, but they will compound tax-free in the meantime. This reinforces the investing wisdom that patience pays. Sometimes the tortoise beats the hare.—**W.B.**

ology finance professor Robert Mer-
on, is the old Wall Street law that
ow risk goes hand-in-glove with mea-
er returns. Over a long period, he
oints out, risk-free investments like
hort-term Treasury bills do worse
han risky assets like stocks and long-
erm Treasury bonds. A portfolio
tudded with protective puts has less
sk, or volatility, than one with only
he stocks. Hence, its expected return
lower.

Prudential-Bache is not the only
oney manager using hedges as a sell-
ng tool. Several bond funds boast of
heir ability to trade in bond futures
nd thereby insulate investors from
nterest rate swings. But Estep points
ut that a fully hedged bond position
mathematically the same as a risk-
ee cash investment like Treasury
ills. Why not just use a money mar-
et account instead, saving the trans-
ction costs?

If successful investors don't play
he market like a roulette wheel or
atch on to miracle systems, what
hen is their secret? It's not easy. In a
hrase, it's buying stocks or bonds for
ess than their intrinsic worth.

How do the value pickers operate? "I never sell anything that goes down. I buy more," says Robert Torray, a Bethesda, Md. investment adviser. His Torray, Clark & Co. has, since its inception in 1972, averaged 16% annual appreciation with a portfolio of equity and bond accounts now totaling $1.8 billion. A year ago Torray was buying out-of-favor stocks like savings and loan associations and staying 95% invested. He sold into the rally and is now 50% in cash.

"Ninety-nine percent of the people in the market allow the market to tell them what things are worth," Torray says. "There are stocks that they totally rejected last August, and now that the stocks have doubled they want to buy them." Investors, in short, are sheep who follow the herd rather than look around to see where the grass really is greenest. In their eagerness to ride the market up, they think they can somehow avoid the ride back down *(see chart)*.

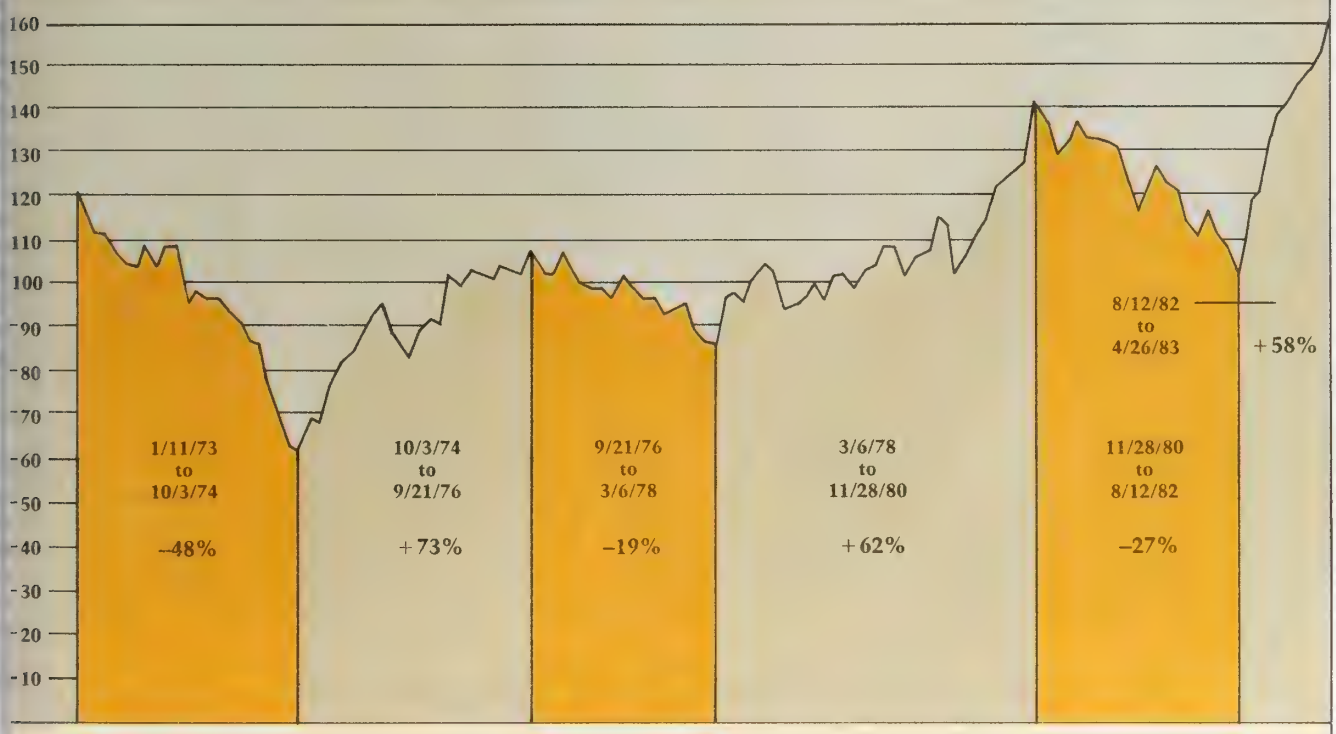
Tweedy, Browne & Co., a New York adviser with a 24-year performance record averaging 17.6%, figures intrinsic value by estimating what a corporation would be worth in a takeover or liquidation. Its investing discipline goes like this: Buy assets for 40 cents on the dollar, hold on for years if need be and sell for 80 cents on the dollar. Market fluctuations are irrelevant. "The stock doesn't know we own it," explains John Spears, a partner, repeating an old Wall Street saw.

So where does that leave someone who's worried today about when to take those handsome gains? Investing would be a lot easier if the timing of a sale were some function of the gain or loss in a position. But the market's long-term rewards, it seems, go more often to investors who understand value than to those with foolproof trading schemes.

Back to the question: when to sell? Answer: Sell when the stock rises to more than it is worth relative to other investments. Concentrate on value rather than on movement. And don't cry if the stock goes up after you sell it—as long as you got out with a nice return on your money. The stock market is a percentage game, not an ego game. ■

The would-be one-way roller coaster

Is it any wonder investors seek the magic formula that will let them ride the market up but not down? A stockholder who held an average portfolio over this span, which begins with a market top a decade ago, would have a mere 35% in capital gains. If he had some system for being invested only during the three bull markets, he would show a 340% gain. Unfortunately, there is no system—from the old down-15%-and-out rule to fancy option strategies—that keeps a portfolio going up in good times but protects it in bad.



Standard Chartered
BANK PLC

Comments by the Chairman, The Rt. Hon. Lord Barber

Profits before taxation for the year ended 31st December, 1982, amounted to $390 million, compared with $419 million the year before. The net profit attributable to shareholders, after deducting taxation and minority interests, was $184 million or $1.42 per share. The total dividend proposed for the year is 43 cents per share.

A modest improvement was achieved in our operating performance around the world in spite of the recession but this was more than offset by the large increase in provisions against doubtful loans.

1982 was a year of difficult trading conditions for commercial banking and consumer finance in most of our principal markets. The worldwide network of foreign exchange and treasury centres achieved very satisfactory results. The slowdown in the South African economy affected our subsidiary there, but the improved prospects in the closing months led to a better outturn than had earlier been anticipated. Union Bank produced creditable results in the difficult Californian market. In the Far East, the tougher trading climate in Hong Kong was exacerbated by some concern about the future of the territory.

In the early part of the year a worldwide cost reduction programme was instituted, the benefits from which will be realised in the current year, as well as instilling a generally more alert attitude to cost factors. For a bank such as ours the importance of keeping abreast of the latest developments in information technology is obvious, and we are engaged in a major exercise to improve the Bank's systems.

Shareholders' Funds now $1,837 million

Capital Resources now $2,628 million

Total Assets now $39,134 million

Exchange rate used $1.61

1,900 offices in over 60 countries around the world.

With such wide geographical coverage there are inevitably changes from year to year in our representational structure. In addition to an increased presence in China, there were other significant changes referred to in my fuller Statement with the Report and Accounts. In particular, in the United States we have formed an integrated management group to make the most effective use of the presence which the Group already has in seven major States.

Our merchant banking interests now cover ten countrie Last year we took a significant further step by agreeing to acqui MAIBL, the first of the London consortium banks, which will merge with Standard Chartered Merchant Bank.

The problems of international debt servicing for the banking system have seldom been out of the headlines durin the past year. It can readily be seen now that several countries had allowed too high a proportic of their public debt to be borrowed abroad and that the prolonged recession and continued high interest rates have created a difficult situation. It wi take time for a better balance to evolve, and banks with a continuing interest in the long-term health of the countries experiencing difficulties must play a responsible and co-operating role in easing the adjustment.

For Standard Chartered o concern is both with the interna health of the countries in which we operate commercial bankin businesses, and with the safety our international lending. Othe than trade finance, internationa lending has never been a domi ant feature of our operations. W have, however, a well spread po folio of sovereign type lending, the major part of which is to countries where we have an established banking presence.

Copies of the Report and Accounts and of the Chairman's Statement may be obtained from Union Bank, Advertising Department, 445 South Figueroa Street, Los Angeles, California 90071

Direct banking, worldwide

Why do Treasuries look good right now? Because federal deficits look so bad.

ILL WINDS

By Ben Weberman

It's hard to see anything good about a $200 billion federal deficit. But there's a definite silver lining for the investor in Uncle Sam's spending binge. The flood of new Treasury issues required to finance it has pulled prices down to levels that make Treasuries, with a couple of possible exceptions, the best buys anywhere in the fixed-income market, short term or long term.

The supply of short-term Treasury maturities, for example, is increasing by leaps and bounds. Because the government has to raise so much money over such a short period of time—almost $200 billion in one year—it must depend largely on these short-term issues. The result is that weekly three-month and six-month bill sales are now running about $750 million to $1 billion a week more than maturing government debt.

In turn, the interest return on a three-month Treasury bill, recently at 8.3%, is now almost exactly the same as that on large, negotiable three-month CDs or commercial paper. So why buy CDs or paper, which can be somewhat difficult to market, when a T bill carries nearly identical yield, is totally marketable and is free from credit risks?

The same is true in longer maturities. A year ago long-term Treasuries were selling at a yield of 13.15%, while a top-rated industrial bond of similar maturity was priced to yield 14.85%. No more. These days a 30-year Treasury bond that cannot be called for 25 years trades to yield 10.4%; but a high-quality corporate issue such as Aaa-rated Atlantic Richfield 11s of 2013—refundable after 1993—trades to yield 10.9%. It made sense to go for the corporate bond when there was a difference of nearly two percentage points in yield. Hardly so when a Treasury bond of unimpeachable quality is available for only 50 basis points less yield. That difference in yield, in my opinion, is more than compensated for by the 14-year difference in refunding or call protection.

The narrowed Treasury-industrial spread is just as dramatic when you step down to Aa-quality industrials. A year ago Dayton-Hudson 14¾s of 2012 were priced 165 basis points above the corresponding-maturity Treasury. By October the same company came to market again with a bond due 2012 priced to yield 11.875%, only 100 basis points more than Treasuries. And by late April, when Phillips Petroleum sold 11.25% bonds, the difference had narrowed to less than 85 basis points.

Are there any exceptions to this thesis that you can't beat Treasuries in today's fixed-income market? Although I still recommend them pretty much across the board, First Boston Corp. analysts Greg Parseghian and Dexter Senft present interesting arguments that some single-A corporates hold an advantage over Treasury issues. It's important, they say, to look at the percentage difference between yields, not merely the absolute difference.

By this reasoning, A-rated corporate issues of companies in cyclical industries have not increased in price relative to Treasuries as much as higher- and lower-quality corporates. A year ago, A-rated bonds returned 280 basis points more than Treasuries, for a 21% difference in yield—16.1% vs. 13.3%. Currently the absolute spread has been cut by two-thirds, to 100 basis points—11.4% for industrials and 10.4% for T bonds. That seems like a hefty decrease. But the percentage difference shrank considerably less, from 21% to 9.5%, because, of course, the base is lower. For cyclical single-As, the premium of corporates over Treasuries at the A level can be as much as 13%. That's a far cry from 0.5%. A 10% or 13% advantage in yield for these lower-rated corporate issues is significant, say Parseghian and Senft. They are recommending A-rated bonds of such companies as Air Products, American Standard, Borg-Warner, Eaton, Georgia-Pacific and Union Carbide.

Another possible exception to this thesis is the GNMA-backed mortgage passthrough certificate, currently at 135 basis points above Treasuries. My problem is that I remember when that spread was 175 basis points, just a year ago, and 170 last December. Nevertheless, 135 basis points is still all right, considering that Ginnie Maes are full-faith-and-credit obligations of the government. So, even though they are taxable in most states, while direct Treasury debt interest is not, the spread is wide enough to make GNMAs a good buy.

This business of following spreads, by the way, has become easier. Why? Because since September the fixed-income markets have become much less volatile, much more like they once were. Most investors remember that, until 1966, when bonds yielded 6% or so, prices would vary over the course of a full year by no more than three or four points. By 1980, though, wild swings were frequent. It was not uncommon to have a three-point movement in a single day. This remained the case through the middle of 1982, and then, as long-term interest rates decreased, volatility did, too. Now bonds range up or down in price by less than half of the roller-coaster volatility of 1980-81, and all that makes it easier to track spreads. ■

Ben Weberman is economics editor of FORBES *magazine.*

The portfolios I see indicate that high-tech companies are woefully underowned by a generation still financially leery of the new-fangled, Orwellian contraptions.

TOO HIGH TECH?

By Ann C. Brown

A room that once was called the den now resembles Strategic Air Command headquarters, with ten wall outlets hosting electronic devices that didn't exist ten years ago. The car "tells" me when I accidentally leave the key in the ignition. And I'm still on page 8, volume 1 of *How to Program Your Self-Cleaning Micro-Convection Oven*, and I will resume reading it after I succeed in programming the automatic-dialer telephone to call-forwarding.

That new technologies have entered the Big Arcade of big business is no secret. That the new technologies have slipped out of the office and into everyday life to the extent that they have may not be as well known or appreciated by investors who fear the stocks may have reached their peaks. My guess is that most of the prices are not excessive—particularly those of companies in the process of making the transition from Silicon Valley's version of mom-and-pop shops to mass merchandisers.

One difficulty in assessing high technology is the diversity of the players. Computer companies come instantly to mind. What may be favorable to mainframe and minisystem manufacturers may have little or no effect on the service companies or on those involved in peripherals or interactive graphics. Then again, the outlook for telecommunications companies may vary sharply from those firms heavily involved in defense electronics, which are subject to congressional whim and military mind-change.

Another problem investors have is understanding the actual high-technology products and services themselves. Most affluent and active individual investors are over 50, and buzzwords like "baud, bandwidth and byte" can be bewildering. While I have no statistics, the portfolios I see indicate that high-tech companies are woefully underowned by a generation still financially leery of the new-fangled, Orwellian contraptions.

About as far as most of these stockholders will go, insofar as technology investments are concerned, are *IBM* (117) and maybe, just maybe, *Control Data* (49). Both of these companies have been around megamonths, electronically speaking, and have proved themselves moneymakers in the stock market. After its latest 20% rise, IBM will likely settle back a bit, but the upcoming introduction of the Peanut low-price computer and a probable stock split should help push IBM considerably higher before this economic upcycle is over.

Control Data, after a minor 1982 earnings disappointment, seems to be back to its winning ways, with per-share earnings estimated to be $4.90 for 1983 and $5.80 for next year. Of the two companies, Control Data would be my choice, at current prices. The P/E ratio is lower and the projected earnings growth rate is the same as IBM's.

Investors wishing to participate in technology areas at a reduced level of risk would be wise to consider a package approach: no more than five names, no fewer than three—one of which might be *Tandy* (59), whose 8,500-plus Radio Shack retail outlets have to be the envy of the competition. Tandy has introduced five new products so far this year and has one more waiting in the wings. The company could show earnings per share of $2.77 this year and $3.60 in 1984. With its P/E ratio lower than its estimated 25% secular growth rate, Tandy continues to offer attractive upside potential.

The same goes for *Wang Laboratories* (37), which looks as if it's headed for its ninth straight year of record earnings. This accomplishment, in the face of last year's profit-killing recession, has not gone unnoticed by the investment community. Wang currently sells at 31 times 1983's estimated earnings per share of $1.17, which leaves little room for unpleasant surprises. However, next year it could earn around $1.55 per share, and future earnings increases of 30% per year are expected for the next several years.

NBI, Inc. (36) is an interesting situation, partly because it illustrates what can happen when a nasty case of lower-than-expected earnings strikes. A couple of months ago NBI predicted a third-fiscal-quarter loss of about as much money as most analysts had been expecting the company to make. The stock dropped 40%, and is now in the process of recovering. This year earnings per share could be in the area of 60 cents to 65 cents, vs. $1.18 in 1982. Next year NBI should benefit from new-product sales and from expanding market demand.

Three promising smaller technology companies, traded over-the-counter, are *Decision Data Computer Corp.* (13), *Seagate Technology* (31) and *BIW Cable Systems* (17). Each seems to have found a niche for itself—Decision Data Computer Corp. in the middle segment of the computer peripheral market; Seagate Technology in manufacturing rigid disk drives; and BIW Cable Systems in producing highly engineered custom cables and connectors designed to meet sophisticated specifications. None of these stocks is cheap, but all weathered the recession and have hefty, healthy balance sheets to support rapid future earnings growth. ■

Ann C. Brown is chief executive officer of the equity advisory and portfolio management firm of A.C. Brown & Associates.

Are joggers better investors than nonjoggers? Not generally, but there is definitely a correlation between exercise and investment success in the stock market.

SWEAT EQUITY

By Srully Blotnick

Is there a connection between exercise and investment success? Five years ago when I was asked that question by a fellow jogger, I was stunned. I had always collected data on the exercise habits of the investors I monitor, and that information, too, was sitting in the database. However, I had never thought to run the two data files through a standard statistical software package to see if any correlation existed.

It quickly became apparent that I needed not only more careful exercise data, but a stock market decline or rally of sufficient magnitude to separate clearly winners and losers. A market that remains in a narrow trading range doesn't offer a good chance to see the connection between physical and fiscal fitness; too many high-tax-bracket investors move to the sidelines.

The historic rally of 1982-83 will always stand out in my mind as a dream-come-true opportunity to study the connection. This time, the data was easy to collect. (People wanted badly to tell me what they had—or hadn't—done.) What I wanted to know was: Is there a connection between exercise and stock market profits? And, if so, what?

Since the individuals I surveyed were, on average, two-thirds invested in mid-August 1982, and had only one-third of their investment capital in cash or cash equivalents, making a killing was easy. They didn't have to buy additional stocks, though nearly any purchases made at the time would have been very profitable. Nevertheless, not all of them made killings. Many felt themselves to be "smarter than the market," dismissed the rally outright and—this is the crucial part—rushed to dispose of their holdings. Needless to say, they cost themselves a substantial sum.

Now comes the key question. Who were the investors who sold so early? In order to make valid comparisons, it was necessary to adjust for a variety of differences. The most important: Investors who usually exercised weren't matched against those who didn't; they were compared with other investors who also usually exercised but were not doing so during this period.

The results? Physical inactivity proved costly to those who normally exercised. Consider an altogether typical instance. Richard is a 49-year-old, 50% owner of a manufacturing concern headquartered in Connecticut. He and his partner have been in business together for 11 years, and their firm has annual sales of approximately $20 million. Three to four days a week, Richard normally jogs and/or plays tennis. Last August he was doing neither. He was too busy, he said, and besides, his hip was a little sore. Where did he turn to find the "action" that exercise usually provided but did not at the time? The market. And how did he find it? By dumping a bit more than half of his common stock portfolio in the first three weeks of the rally.

Couldn't he have found the same amount of action, and in many ways more, by buying stocks, not selling them? Absolutely. To begin with, though, he was more than 70% invested at the time, so he felt well stocked. The second reason he sold instead of bought goes right to the heart of the matter, since it involves the effect of exercise on one's outlook. Namely, in most cases, exercise brightens it.

Even though energy is used during the physical activity, it must be viewed in some sense as excess energy, manufactured solely to be spent. Why? Because remaining sedentary and letting the energy stay bottled up produces irritability and mild depression in Richard's case—and many others'. The man is decidedly more grouchy when he doesn't do anything athletic for a while.

In short, the lack of exercise made Richard seek action wholly in the market, and the same lack of exercise made him respond in both an abrupt *and* a negative way to the events that were rapidly unfolding there. The upshot: Compared with a group of his peers (in terms of age, education, income, assets, investment preferences and experience) who maintained their normal level of athletic activity at the time, he did significantly less well than their median performance.

One especially interesting point about exercise emerged: It is apparent that white-collar workers strongly prefer leg-oriented exercise. So much so, that when they can't use their legs to run, bike or play tennis, say, because they have a sore hip, knee or ankle joint, they do nothing. Had Richard been more open-minded about the subject and made use of an upper-body exercise regimen while his hip was sore, my guess is that his investment results for the period would have been markedly improved.

The lesson in all this is clear: What needs to be assessed before buying or selling in a frenzy is whether your mood of the moment, your degree of optimism or pessimism, is being generated by external or internal conditions. An excess of nervous energy within can make you feel quite out of sorts and color your judgment. Do yourself a favor next time the market goes through the roof—or the floor: Exercise, *then* call your broker. ■

Dr. Srully Blotnick is a research psychologist and author of Getting Rich Your Own Way *and* Winning: The Psychology of Successful Investing.

Keynes realized that his depression cure was not a cure for all problems, but his disciples have not been willing to follow.

A HISTORICAL PERSPECTIVE

By Ashby Bladen

Anybody who looks at the world through a credit analyst's eyes sees red lights blinking all over the place. The fundamental causes that lead to serious financial trouble have been operating for 20 years, but until recently, perceiving them demanded a high degree of theoretical sophistication. Now, however, the signs are clear for everybody who cares to heed them.

Nevertheless, the stock market keeps right on making new highs week after week. I know that I have been premature in sounding the warning before, but to me this looks like the best opportunity to bail out—i.e., after it has become clear that the plane is going to crash—since the market also rallied 50% in 1930. And it is not only individual investors who should take heed. The next big financial services winners will be the institutions that keep their reputations intact so that they can pick up the pieces of the ones whose credibility has been shattered. The Baldwin-United fiasco is a case in point that will greatly improve the competitive position of sound financial institutions.

The most useful thing I can do now is to help you understand why the coming crash is, for all practical purposes, inevitable and to show you how our systematic misinterpretation of the last one helped to make it so. Santayana said that those who will not learn from the past are doomed to repeat it, and we are about to find out that that is true. But it would be absurd for our children to repeat the same mistake.

The reasons the slump of 1930 developed into the Great Depression are many and various, but from a credit analyst's point of view, most of them share a common denominator. For a decade and a half during and after World War I, the burden of debt service requirements rose enormously, but several conditions simultaneously prevented the increase in incomes that would have permitted the debtors to meet their obligations.

For example, many American farmers assumed that the high food prices of the war years and the immediate postwar period of shortages and inflation were permanent. So they borrowed heavily to pay peak prices for farmland. Then, after postwar reconstruction had restored foreign production and the domestic fiscal and monetary crunch of 1920 had broken the high cost of living, they could not earn enough to carry their debts. Does that sound familiar? Also, during the early 1920s American banks underwrote large foreign loans and sold the bonds to American investors. But the American government was not willing to let foreigners sell enough here to service their debts to the American people. Once again a situation with a familiar ring.

Thus, the basic cause of the Depression was financial—too many people, businesses and governments had too many debts and could not earn enough income to repay them. But at the time this simple and commonsense explanation was not available because the economists' conventional wisdom held that a prolonged slump was impossible. It sounds ridiculous now, but before John Maynard Keynes could get a hearing for his ideas about how to cure the Depression, he first had to prove that a depression was theoretically possible—in spite of the fact that it had then been going on for six years.

He did it by arguing that businesses persistently tend to invest less than people intend to save. But since actual saving and actual investment must be equal, because they are just two ways of looking at the same thing, the difference between intended saving and investing is reconciled by a fall in output and incomes until the excess of intended savings is wiped out. So the way to avoid a slump is to encourage investment and discourage savings—by any means. Two obvious means are to make credit readily available and at low interest rates.

Before Keynes died, shortly after the war, he had realized that the besetting problem of the postwar era would be inflation, not slump. But by then the damage had been done. So for roughly 40 years both national and international financial policies have been based on the theory that it is desirable to encourage borrowing and spending and to discourage saving. So it is not surprising that the burden of debts has again become excessive. But this time something new has been added. After half a century of low interest rates that frequently fell below the rate of inflation, the savers have finally rebelled. Now they are demanding a real rate of return—after inflation. And that, of course, adds to the burden of debt service requirements on incomes.

One major cause of the developing financial crisis is the dogmatism of Keynes' disciples, who made his suggestions about how to cure the Depression into a universal panacea that is supposed to be good at all times and in all places. It means a painful few years for our generation, but the prospects for our children will depend mainly on whether we recognize that curing this crisis will require more saving and less borrowing, or opt once again for the hair-of-the-dog approach. ■

Ashby Bladen is senior vice president for investments of the Phoenix Mutual Life Insurance Co. and author of How to Cope with the Developing Financial Crisis.

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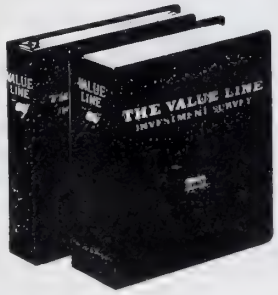

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Barring a major speculative rally, the wheat traded in Kansas City will gain relative to that traded in Chicago.

THE "PIK" OF THE WHEAT TRADES

By Stanley W. Angrist

Among commodity traders there is a group that can be termed "percentage players." That is, they go back and study the history of certain trades over the years and find those that have a high degree of seasonal reliability. And then something comes along (economists call those somethings exogenous events), and the trade no longer performs with the same degree of reliability. Usually, the trade fails for the first time in 12 years just after you mortgage your house to finance the one speculative coup that your research says will make you wealthy beyond counting. Alas.

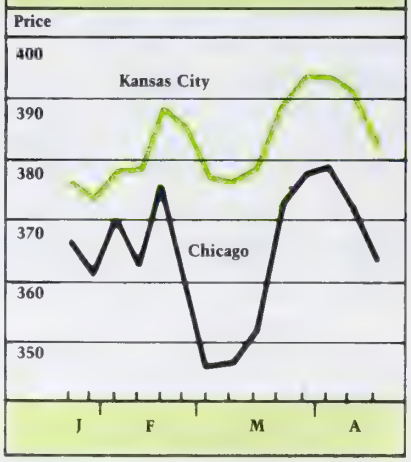
Intermarket wheat trades involving the Chicago and Kansas City contracts have been seasonal favorites over the years. This year these trades have had their regular pattern disturbed because of the government Payment-in-Kind (PIK) program, which provides a farmer with government-owned commodities if he agrees to cut his plantings.

Hard Red Winter (HRW) is the class of wheat deliverable against the Kansas City contract, while Soft Red Wheat (SRW) is the primary product delivered against the Chicago contract. The price relationship between the two classes is related to the stock levels of each type of wheat. Thus, when SRW stocks are high relative to HRW stocks, Chicago prices will be weak relative to Kansas City prices. It is this situation that seems to be influencing the Kansas City/Chicago wheat spread this year.

Katherine Jones and John Randall, commodity analysts at Paine Webber, believe that there are two fundamentals that will cause the stocks of SRW to increase relative to HRW: 1) Based on current projections for the 1983-84 season, HRW production should be reduced by 30% to 35% because of farmer participation in the PIK program. SRW production looks as if it will decline only slightly—around 14%—from last season's near-record levels; 2) export demand for SRW has been, and is projected to continue to be, very weak, while HRW wheat exports have greater potential to increase in the weeks ahead.

Potential profit PIKture

The spread between Kansas City and Chicago wheat prices has been particularly wild this year. In early March it exceeded 30 cents per bushel before narrowing again. The PIK program and export demand could cause it to widen again.



The PIK program, at least with wheat farmers, has been much more enthusiastically embraced by producers of HRW in the states of Kansas, Nebraska, Oklahoma, Texas and Colorado, relative to the SRW producers in the Midwest and Southeast. Now that wheat prices have come off their lows, it is widely believed that there will be a certain amount of slippage among wheat producers. Slippage occurs when farmers in the PIK program put part of their acreage back into production—something they can do at little or no penalty. Paine Webber's Jones believes that the slippage effect will be great in both the SRW and HRW regions. However, she believes it will play a bigger role in the SRW areas.

The second major factor affecting the Chicago/Kansas City wheat spread is the level of exports. In recent months SRW exports have been very slow because of the absence of China from the market. China is the major purchaser of U.S. Soft Red Wheat, accounting for over 60% of all sales annually in the last few years. The export market for HRW has also been slow compared with last season. In recent weeks, however, its outlook has improved.

The major adverse risk to the Kansas City contract widening relative to the Chicago contract would be a large speculative bull move in wheat futures. Typically, the Chicago market moves more sharply than the Kansas City market during speculative rallies.

The spread that I think is worth trying is long Kansas City/short Chicago wheat, basis the September contract. I would try to put the spread on, with the Kansas City contract selling for no more than a 16-cent premium to the Chicago contract. The spread has found good support at the 12-cent level. I would risk no more than 5 cents ($250 per spread) from my entry point. The spread could once again widen out to the 30-cent level, for a 14-cent profit ($700 per spread).

The margin on this spread is $750, while the round-turn commission should be around $80. ■

Stanley W. Angrist is a commodity speculator, consultant and longtime observer of the commodity markets.

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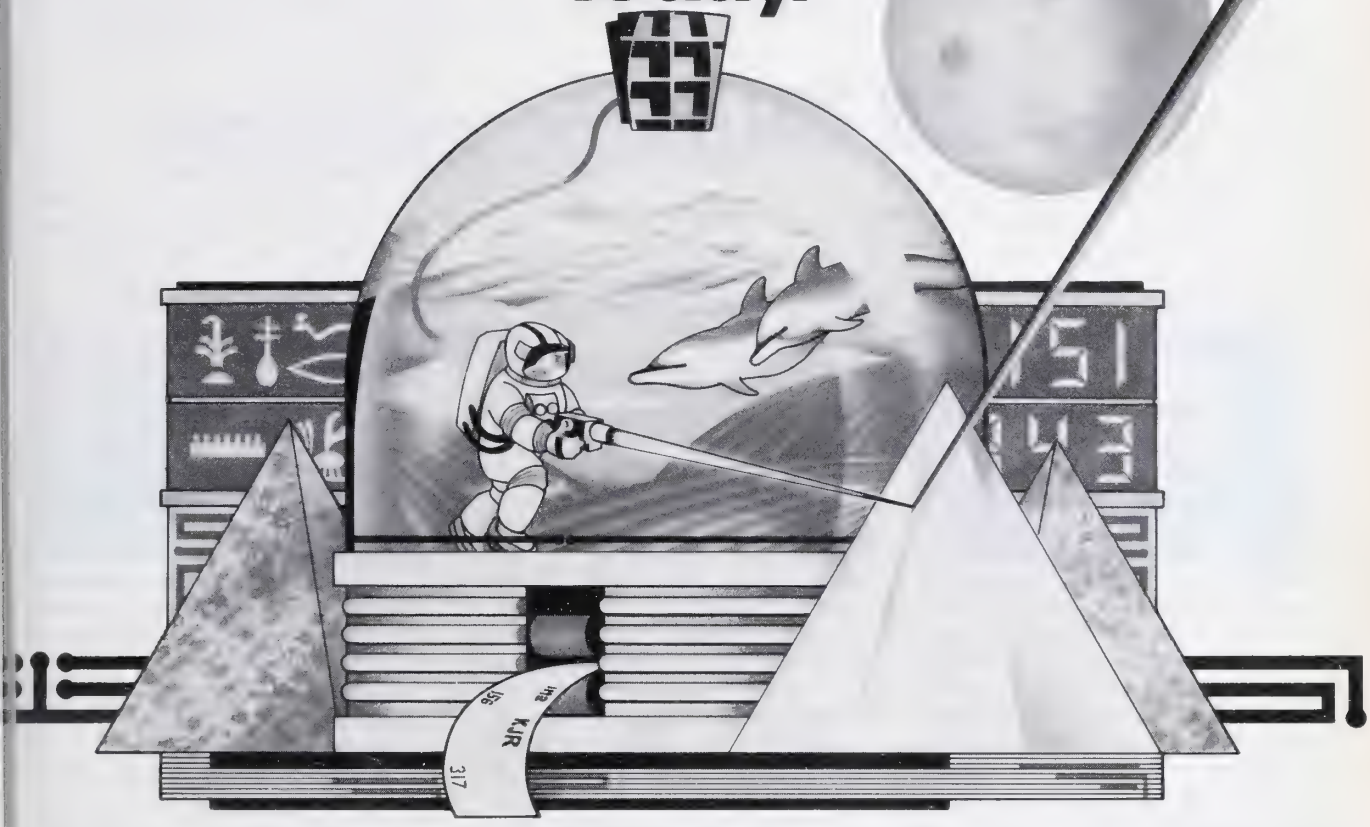

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Venture capital is on a roll. But you wouldn't know that by its style.

A NEW ERA?

By Thomas P. Murphy

Every year, just about cherry-blossom time, members of the National Venture Capital Association converge on Washington, D.C. for a day and a half of speeches, mostly by senators and congressmen. (This year the stock market obligingly hit a historic high during the convention.) But the real point of the affair begins when the speeches are over—the chance, over a drink, to renew the old-boy contacts that still largely keep the venture capital industry functioning. It remains a world of who you know and which syndicated deals you are invited in on. That hasn't changed much. But there is a sense that nearly everything else in venture capital is changing, in some ways radically. The industry is going somewhere fast. But where?

Money is the conspicuous symbol of the change. For example, try to hire an experienced venture capitalist. Two years ago $100,000 and 3% of the profits brought you candidates. Now, I hear numbers like $200,000 and 5% of the profits, and recruiters claim that these jobs are very hard to fill.

The numbers the venture people are dealing with are beyond their dreams of a few years ago. Megafunds—$50 million to $100 million and more—are within the reach of any fund manager with a track record and the desire to manage bigger money. Curiously, a lot of fund managers who thought $20 million or so was just about right for a successful venture business have "mellowed" on the point as money has become easier to raise. Now $50 million seems comfortable—a nice medium-size fund.

That such money is available from pension funds, wealthy individuals, corporations (minimum investment usually $1 million, and these funds are always private), etc., reflects the success most of the funds have had over the past couple of years. While historically the venture funds claimed they made 20% to 30% on their invested capital (though hardly anyone took the claim seriously), many of the funds now can point to 50% or more compound growth rates.

The cautious in the industry hate to see those numbers used as a selling argument to investors. They are, the reasoning goes, unsustainable over the longer run, the product of a strong stock market for everything, particularly for the commodity venture capital deals in—fast-growth, high-technology companies.

But success is the enemy of modesty, and it is a competitive world for investors' dollars. If some venture capitalists claim they are doing "40% or 50% compounded," you come off a bit flaccid to suggest anything less ambitious for your own fund, if you are out raising money.

Of course, the implications of that kind of growth become a bit staggering. A $100 million venture fund with a ten-year average life and a 50% growth rate would liquidate at $5.7 billion. The venture capitalist's share of those profits would come to well over $1 billion!

While I never waver in my faith in the tooth fairy, I find those kinds of numbers stretch my credulity. Nevertheless, a lot is happening that is hard to quantify, but it suggests something more fundamental than a frothy stock market to account for venture's current success.

What seems to have happened (Lord, forgive me if I am inventing a "New Era") is that a whole system has evolved around venture capital that is taking ideas from the laboratory to the marketplace faster than in the past, with what appears to be a higher ratio of successes. Part of that is a financial, as well as technical, infrastructure that is vastly better than anything that was available in the Seventies, or earlier.

As an example, a venture capitalist with a successful startup company in the mid-Seventies had no assurance he could get second-stage financing for it, much less take it public. Success could be almost as ruinous as failure, since growing companies suck up prodigious amounts of capital.

Now it is different. Some venture capitalists, not to mention major insurance companies, are not only specializing in later-stage investment, but in every stage in the growth process of a company, through to the public market. Given the certainty that capital will be there, companies and their financial backers can move and plan with a level of assurance unknown when every stage in the process was iffy. The financial system is efficient, it is reliable and it rewards success quickly. Sometimes, I think, too quickly—before it becomes real success.

Another element in the equation: Entrepreneurial small business, for reasons I don't believe anyone fully understands, has turned out to be a fast and low-cost way to get innovative products to the marketplace. History is also kind right now to the venture capitalists and entrepreneurs. There happen to be a large number of technologies ripe for commercial exploitation by entrepreneurial-style business.

Venture capital is on a roll. But you wouldn't guess it from the industry's convention. The style is still more Old New England than Texas—low key, earnest. It's okay to have it. But you don't flaunt it. ■

Thomas P. Murphy heads a venture capital firm, Partnership Dankist, Stamford, Conn

Are you worried that stocks and bonds have rallied too far, too fast? Don't be, because they are truly worth more today.

GO FINANCIAL

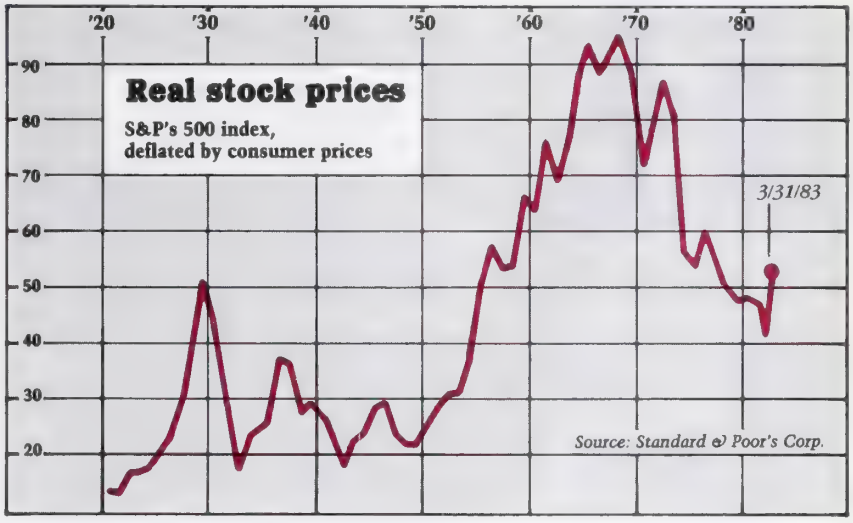
By A. Gary Shilling

You may well wonder if stocks and bonds can rally forever. The economy, after all, has not kept pace with financial markets. The economy probably will be sluggish for the rest of the year. Then why buy stocks and bonds?

There are compelling reasons for the strength in the financial markets and they have to do not with tape-gazing but with basic shifts in the economy. Inflation has declined sharply and should stay low. It's true that real interest rates, that is, interest rates minus the rate of inflation, remain high compared with earlier postwar levels. The current trend of actual interest rates, however, is down and that is good news for stock and bond buyers—as long as they don't leverage themselves too heavily at today's still-high financing costs.

With low inflation and interest rates, existing bonds will fetch higher prices. Lower bond yields mean less competition between stocks and bonds, so investors will pay higher prices for stocks, driving up price/earnings multiples. To put it another way, lower interest rates will induce investors to discount the future stream of earnings and dividends at a lower rate. If stocks are selling for more than they were a couple of years ago, they are also worth more.

This is truly a watershed. We have reached a turning point in terms of the price investors will pay in relation to earnings. This key development reverses the pattern we have become accustomed to since the mid-Sixties. During that period, inflation was shifting earnings from corporations to the federal government. Investors were much quicker to realize this than were corporate officials. As a result, inflation-adjusted stock prices fell dramatically. Even after the tremendous rally that began last fall, stock prices on an inflation-adjusted basis are no higher than they were 25 years ago—as the chart shows.



Tangibles, on the contrary, are not rapidly appreciating in value as they did during inflation's heyday. These assets will not be worth much more tomorrow than today. As I said in this column of May 9, real estate, except for rental properties, is no longer a bonanza. Nor are collectibles such as antiques, art works and coins. Inflation-driven hedge-buying doesn't make sense now that inflation has abated.

To be sure, some gold bugs have been chirping loud warnings about the prospects of renewed inflation or world disaster. Gold is certainly a legitimate investment as a hedge against inflation or political risk. Political risk remains with us, but the inflation-hedging merits of gold are no longer indispensable to the investor.

What are the best investments? Make quality your guide. Financial risks are still numerous, so choose your investments carefully.

Top-rated corporate and municipal bonds are smart choices. U.S. Treasury obligations are also attractive, since they offer a high degree of safety and liquidity. They also are protected against the call provisions of corporate bonds that could limit capital gains.

As for stocks, it pays to invest in companies that are geared for low inflation, firms that emphasize cost control and volume expansion.

Volume should rise rapidly in catch-up areas like housing and autos and related industries, such as appliances, home furnishings and auto parts. Defense-related companies should continue to see strong growth, as should high-technology firms that manufacture productivity-enhancing and labor-saving equipment.

For a decade it was smarter to be in tangibles than in financial assets; now the tables are turned. ■

A. Gary Shilling, a guest columnist, is president of A. Gary Shilling & Co., Inc., a New York economic consulting firm. He is author of Is Inflation Ending? Are You Ready? *just published by McGraw-Hill.*

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The Contrarian

The competition claims that low P/E stocks don't provide superior results. Apparently, they never heard of dividends.

IMPERFECT CRITICISM

By David Dreman

Fortune magazine stubbornly maintains that the stock market is an efficient pricing mechanism, a theory that only an academician could love and one that many active investors think is far-fetched. My approach, by contrast, is to find value others miss. In its latest issue, *Fortune* calls me "the most devout believer in unpopular stocks"—for which I thank the editors. But the magazine goes on to say: "Formulas based on P/Es and other simple ratios don't seem to work."

How does *Fortune* know this? One of its editors used a hand-held calculator to measure the performance of a group of stocks selected randomly from its "500" list. The test involved one-year and five-year periods, but unfortunately the writer overlooked some pitfalls that I have repeatedly pointed out.

Most important, if you want to make money in markets, *don't fall for short-term records*. More has already been lost this way than bankers would write off if all Third World countries defaulted at once. Is five years short term? For issues as sweeping as this, it certainly is.

Many a guru can look good for two or three years, or even four or five. Joe Granville and Henry Kaufman fielded everything until they free-fell from Mt. Olympus last year. The same for trendy stocks. Oil-service companies were hot for seven years, then came the glut, and poof! Or remember the five years before 1973, when without a gun in your hand you couldn't force an institution to buy anything but the top 50 stocks. Then the roof caved in on the two-tier market. The refrain is endless.

Unfortunately, the argument doesn't end here. The problem with *Fortune*'s logic goes to the heart of efficient-market theory and once again shows the dangers of trusting a short-term record. I'm referring to Beta risk, the statistical measure of a stock's volatility. The theorists say that markets are efficient because Betas are stable and predictable. This mouthful means that investors, always behaving unemotionally and with the precision of a high-powered computer, know exactly the risk they are taking in each stock or portfolio they buy.

Sounds good, and the statistics looked impressive in the late Sixties when Modern Portfolio Theory was developed. But today the very Betas that were MPT's Holy Grail have been proved useful only as past measures—not as predictors—of risk. Once again, a short-term record, this time of the efficient market itself, has been blown out of the water.

This brings me back to the *Fortune* column. Its author believes low P/E investing is a gimmick. He is wrong. It is a formula based on the largest and longest-standing body of empirical evidence about stock market investing that, to my knowledge, exists today. Numerous major studies, overlapping the last 45 years and using far more stocks than could be fed into a hand-held calculator, all came out with results

David Dreman is managing director of Dreman, Gray & Embry, Investment Counsel, New York, and author of The New Contrarian Investment Strategy

favoring low P/E stocks.

So what do studies of one or a few years mean? Next to nothing, as academic work shows convincingly. The leading mutual funds in one period, for example, often turn out to be laggards in the next.

To make matters worse, *Fortune* made a major boo-boo. Its analysis ignored dividends, and the author indicated that factoring them in wouldn't have made a significant difference. This dismisses the fact that low P/Es and high yields frequently go together. And reinvested dividends are the major source of long-term stock market returns.

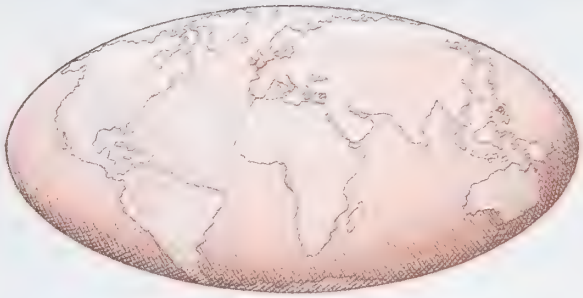
A 2,000-stock analysis I presented in this column several years back, for example, showed that the 30% with the lowest P/Es had approximately 2½ to 3 times the yield of their higher-flying brethren. These dividends provided better price protection in bad markets and higher price appreciation in good ones. Factoring in dividends is irrelevant? Come on now, fellows.

I agree with *Fortune*. There are no black boxes in investing. But I do not believe—and evidence supports me—that the market is an efficient pricing mechanism. Because it is inefficient, it often bestows low P/Es where they are not deserved. In time, investors will correct these poor judgments, but rarely overnight.

My strategy, then, is not one for the impatient or for those who want fast gains to brag about with their luncheon buddies. Buying low P/E stocks requires patience—and the discipline to get out of the crowd's way when it is overenthusiastic and to get into the market when others are selling everything in sight.

If you are looking for thrills in the short term, low P/E is not for you. Meanwhile, the Boot Hill of ex-gunslingers, arbitragers and trigger-happy commodity men grows larger every year. This year's crop of miracle money managers will provide its own share of corpses.

On the other hand, you may want a proven method of making money by going against the crowd. If you have discipline and can think long term, then paying a minimum multiple for earnings and buying good-quality, larger-capitalization, high-yielding stocks should serve you well—whether you use a hand-held calculator or not. ■



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Index of companies covered in news stories and by the columnists in this issue.

Abbeville Press 8
Harry N. Abrams 8
AFA Protective Systems 60
Air Products 191
Allen-Bradley 50
Amdahl 176
American Agronomics 48
American Express 40, 48
American Standard 139, 191
Ames Dept Stores 46
Anchor Hocking 134
Armco 34
Asahi Glass (Japan) 182
ASK Computer Systems 13
Astro (Sweden) 182
AT&T 12
Baldwin-United 194
Banque Bruxelles Lambert (Belgium) 182
Bethlehem Steel 30
BIW Cable Systems 192
BL (U.K.) 10
Bonneville Power Administration 74
Borg-Warner 191
Burlington Northern 34
Burns International Security Services 60
Caldor 46
CBS 40
ChemLawn 64
Chrysler 180
Clorox 66
Cluett, Peabody 158
Coca-Cola Bottling of Miami 168
Colgate 66
Columbia Pictures 40
Computer Faire 79
Comserv 13
Conrail 34
Consolidated Edison 74
Control Data 192
Dayton-Hudson 191
Decision Data Computer 192
Delhize (Belgium) 182
Deluxe Check Printer 139
Dynasty Computer 76
F. Eberstadt & Co 66
E.B.E.S. (Belgium) 182
Eagle Clothes 135
Eaton 50, 191
Electrobel (Belgium) 182
Ennis Business Forms 56
Equitable Life Insurance 158
L.M. Ericsson (Sweden) 182
Exxon 142
Finance America 60
Ford Motor 35, 164, 180
Fortune 200
GE 54, 78
General Mills 10
Georgia-Pacific 191
Gist-Brocades (Netherlands) 182
Glaxo Holdings Ltd (U.K.) 66
GM 180
GNMA 191
Goldcrest Films (U.K.) 166
Great Pacific Fund 186
Grey Advertising 14
Grumman 18
Gulf & Western 40
Hartwell Leverage Fund 66
Hoechst A.G. (W. Germany) 140
Home Box Office 40
Household Finance 60
IBM 176, 192
Intelligent Systems 59
Interactive Tele-Marketing 82
International Gold Bullion Exchange 12
IT&T 13
John Harland 139
K mart 46, 135
Kansai Electric Power (Japan) 182
Kayser-Roth 36
KDT Inds 46
Kemper 182
Eli Lilly & Co 140
Marui (Japan) 182
Matsushita Electric (Japan) 182
MCA 40
Memorex 176
Merrill Lynch 8, 182
Mobil 142
Mocatta Metals 166
Moore 56
Motorola 35
NBI 192
Neuberger & Berman 66
New York Times 18
Nordisk (Denmark) 140
North American Philips 35
Northwest Energy 74
Nova 40
Novo Industri (Denmark) 140, 182
Orkin 64
Pacific Gas & Electric 59
Pacific Telephone 13
Paine Webber 66
Palm Beach 158
Pearson Longman (U.K.) 166
Philips Inds 86
Phillips Petroleum 191
Pinkerton's 60
T. Rowe Price-Fleming Intl 18
Procter & Gamble 6
Prudential-Bache 8, 170, 18
Quaker Oats 1
RCA 18, 3
Rocky Mountain Bank Note 13
Rohr Inds 1
Rolex (Switzerland) 16
Rudco 13
Sales Techniques 7
Scudder Intl 18
Seagate Technology 19
Seattle Steam 7
Seidler Amdec Securities 6
Sensormatic Electronics 5
Servamatic 5
Shearson/American Express 4
Simon & Schuster 7
SmithKline 66, 8
Socal 14
Software Agency 7
Southern California Edison 7
E.R. Squibb 14
Standard Register 5
Stein Roe 6
Tandy 19
Tenneco 7
Terminix 6
Texaco 14
Textron 3
The Original Computer Camp 7
Time Inc 40, 200
Times/Mirror 8
Tishman Speyer Properties 15
Torray, Clark & Co 18
Towle Mfg 13
Transatlantic Fund 18
Tweedy, Browne & Co 18
U.S. Steel 3
Union Carbide 19
Union Pacific 3
United Technologies 11
Viacom 4
Wackenhut 6
Wal-Mart 4
Wall Street Journal 1
Wallace Computer 5
Wang Labs 19
Warner Communications 35, 4
Warner-Lambert 12
Washington Natural Gas 7
Wesray 13
Whittaker 6
Woolco 13
Zenith 3

Do you know anybody who is somebody in business who does not read Forbes Magazine?

Forbes: Capitalist Tool

Flashbacks

Edited by Dero A. Saunders

"The more things change. . . ."
Items from past issues of FORBES

ixty years ago in FORBES

om the issue of May 26, 1923)

About 200,000 workers have been lded to factory payrolls in New York ate since the first reports of a labor ortage appeared a year ago, says the ate Labor Department. 'Only in the onths of September and October 22 and March 1923,' says the statent, 'has the number of workers lled for by the employers exceeded e number of persons registered for ork since October 1920. There is w, however, a plain trend toward a al shortage of labor.' "

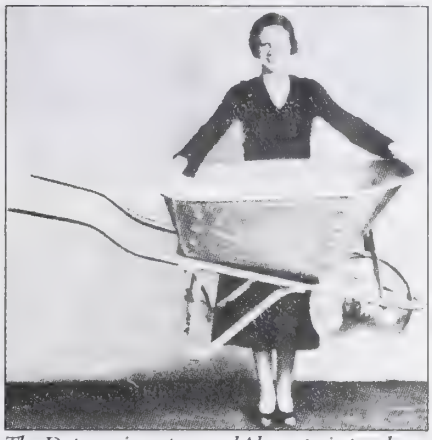
To prevent the exodus of Negroes om the South to the North, joint eetings of white and Negro citizens ve been called in many southern ties to discuss the situation. Activies of labor agents from the North are nder investigation in Tennessee."

Reciprocity with the U.S. on agricural produce was proposed in the Canadian] House of Commons by the on. W.S. Fielding, Minister of Fince, in connection with the introction of his annual budget. It seems rtain, however, that if the new prosals should be approved in Parliaent, and should the American govnment be prepared to accept the anadian proffer, a vigorous political ontest would be precipitated, with e possibility of another election in e coming fall. The manufacturing ovinces of Eastern Canada are rongly opposed to the measure, as ey believe it would eventually lead reciprocity in industrial products."

ifty years ago

ay 15, 1933)

This spring, with despair in his art, the retail druggist is seeing cosetics, toothpaste, mouthwash, and her packaged drug items blossom t on grocers' shelves. The druggists' w menace got its start when a gro-r in Houston, Tex. installed a packed drug department and found that th profits and sales took an upward rn. Now the plan, sponsored largely y voluntary grocery chains, is headg north and east, accompanied by itter protests from druggists. They ar that if the invasion continues,),000 grocers will be selling drugs by e end of the year."



The Depression spurred Alcoa to introduce this lightweight aluminum wheelbarrow

"Three years ago many thousands, in large cities and small, were spending their hard-earned money to see a sensational so-called travel film, *Ingagi*. The picture was a glaring fake, a monstrous misrepresentation. Every cent paid for admission . . . was diverted from legitimately operated motion picture theatres. On Apr. 8, 1931, the case came before the Federal Trade Commission. On May 5, 1933, the Commission announced that the producers of *Ingagi* must 'cease and desist.'

"This after nearly three years! This after the fake film has done all the damage it possibly could! This after it no longer has power to hurt self-respecting exhibitors! . . . Verily, governmental 'protection' protects weirdly but not wonderfully."

"When the 1907 panic was raging, the late J.P. Morgan, who became commander-in-chief of the financial world, telephoned C.A. Coffin, then head of General Electric, and asked how he was circumstanced financially. It so happened that the farsighted electric veteran, sensing coming trouble, had accumulated [some 15] millions in hard cash. Rather proudly, he assured Morgan that he was all right.

" 'How much money have you got?' queried the banker. Told, he peremptorily ordered, 'Send over half of it at once.' And without further ceremony, commander-in-chief Morgan hung up the telephone."

Twenty-five years ago

(May 15, 1958)

" **'There are just two periods** in the oil business,' the late Harry F. Sinclair told a newspaperman in 1921. 'One is when you are accumulating oil reserves. The other is when you are selling them.' . . .

"Last month a period of historic accumulation seemed to be drawing to a dramatic climax. In the Middle East, reserves were up a staggering 15% in just one year. Latin American reserves, led by Venezuela, shot up 17%. Africa had still to make the weight of its own vast reserves felt, but that the Dark Continent has rich fields nobody doubted. Already the signs of oversupply were painfully evident: In Texas last month, producers were working an eight-day month for lack of customers."

"Among the U.S.' larger corporations, $485 million (assets) Deere & Co. is one that has consistently ignored most of the rules. Broken rule number one: For all practical purposes it has failed to diversify. Broken rule number two: It has tied up so much cash in receivables (currently $224.3 million, or 46.2% of its total assets) that it has sometimes looked more like a finance company than a manufacturer. Broken rule number three: It has gone in for no grandiose expansion programs, has increased its net investment in plant and equipment by a mere $38 million over the past ten years.

"But just as consistently as it has broken rules, the Moline, Ill. firm has gone on year after year piling up far and away the most impressive profit margins in the sluggish and highly competitive farm equipment business. In the latest five years Deere's operating profit margins have averaged 17 cents on the sales dollar as compared with just 9.2 cents for competitor International Harvester and 6.5 cents for Massey-Ferguson."

Deere & Co. President William A. Hewitt

Thoughts
on the Business of Life

It takes a person who is wide awake to make his dreams come true.
ROGER BABSON

Life is either daring adventure or nothing.
HELEN KELLER

Without hope men are only half alive. With hope they dream and think and work.
CHARLES SAWYER

Experience shows that sometimes success is due less to ability than to zeal. The winner is he who gives himself to his work; body and soul.
CHARLES BUXTON

Great actions are not always true sons of great and mighty resolutions.
SAMUEL BUTLER

If you have the will to win, you have achieved half your success; if you don't, you have achieved half your failure.
DAVID V.A. AMBROSE

To believe is to be strong. Doubt cramps energy. Belief is power.
FREDERICK WILLIAM ROBERTSON

Great hopes make great men.
GEORGE FULLER

The greatest asset of a man, a business or a nation is faith.
THOMAS J. WATSON

Don't part with your illusions. When they are gone, you may still exist, but you have ceased to live.
MARK TWAIN

Have patience, remembering that everything worth building costs much expenditure of zeal and effort and sweat. Also have faith, and never for a moment doubt your ability to do the things you really want to do.
B.C. FORBES

Genius is eternal patience.
MICHELANGELO

He that is overcautious will accomplish little.
JOHANN SCHILLER

A man who is master of patience is master of everything else.
GEORGE SAVILE

The important thing in life is to have a great aim and to possess the aptitude and the perseverance to attain it.
GOETHE

God is with those who patiently persevere.
ARAB PROVERB

Most men fail, not through lack of education, but from lack of dogged determination, from lack of dauntless will.
ORISON SWETT MARDEN

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The future destiny of the child is always the work of the mother.
NAPOLEON BONAPARTE

It is never too late to be what you might have been.
GEORGE ELIOT

The great pleasure in life is doing what people say you cannot do.
WALTER BAGEHOT

Follow your own bent no matter what people say.
KARL MARX

In actual life every great enterprise begins with and takes its first forward step in faith.
AUGUST SCHLEGEL

A Text . . .

According as he hath chosen us in him before the foundation of the world, that we should be holy and without blame before him in love.
EPHESIANS 1:4

Sent in by Sister Bernice Segar, Kirkwood, Mo. What's your favorite text? *The Forbes Scrapbook of Thoughts on the Business of Life* is presented to senders of texts used.

The first and final thing you have to do in this world is to last in it and not be smashed by it, and it is the same way with your work.
ERNEST HEMINGWAY

Go confidently in the direction of your dreams. Live the life you have imagained.
HENRY DAVID THOREAU

ntroducing a new breed of Bulldog.

re comes Mack Ultra-Liner®. a lot more Bulldog. And a ole lot more than just another k.

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FORBES
June 6, 1983

Forbes

BURLINGAME
MAY 26 1983
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op executives from archrivals Hertz and Avis usually don't have cozy chats. But on Feb. 4, 1982 Joseph Vittoria, president of Hertz Europe, huddled h Avis CEO J. Patrick Barrett in the TWA Ambassador Lounge at JFK port. Subject: the presidency of Avis. Vittoria was en route to his Hertz post London, and Barrett wanted to sound him out before the plane took off. Within weeks of the clandestine meeting, Vittoria agreed to leave the driver's of Hertz Europe and try harder at Avis, where he is now president. He is a defendant in a notable—and increasingly common—kind of lawsuit. His employer claims he had no right to change hats and head up the competition. s, despite the facts that Vittoria had been removed from the presidency of tz and that . . . *(the story "Who owns your brains?" continues on page 168)*

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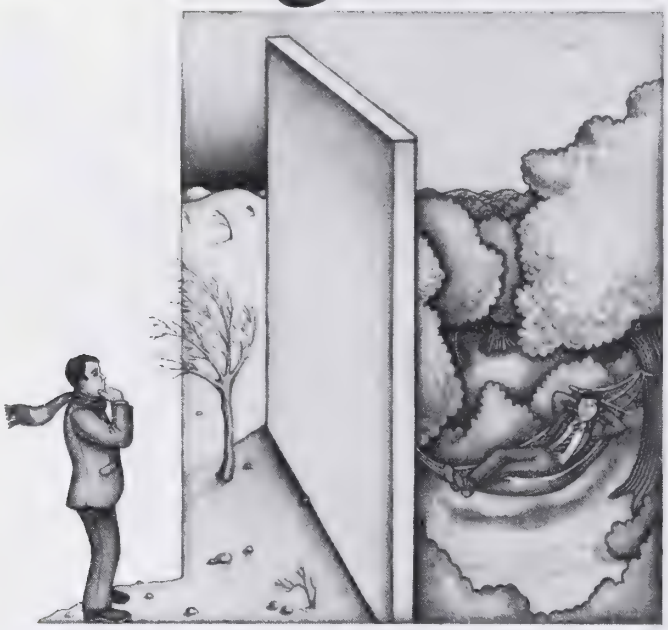
Industrial Development Department
Room C683
176 East Fifth Street
St. Paul, Minnesota 55101

There's one hitch to the Seligman Capital Fund and its splendid record. It's not for everyone.



If you don't need current income and you're the kind of person who's willing to take above-average risks hoping to achieve substantially above-average capital appreciation the Seligman Capital Fund is for you.

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But that's not the case with the Seligman Capital Fund.

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While past performance is no guarantee of future investment results, Seligman Capital Fund is the choice of many investors.

The Fund has a mix of both individual and institutional investors. People use it for IRA or Keogh plans or as part of an aggressive investment for their future. Corporations may use it to meet long-term goals for pension and profit-sharing plans and institutions may find the Fund a way to increase capital for their future needs.

J&W

Ernest A. Remig, President
J. & W. Seligman & Co. Marketing, Inc.
One Bankers Trust Plaza
New York, N.Y. 10006

F301

Please send more complete information on Seligman Capital Fund and a prospectus, which covers charges and expenses and which I understand I should read carefully before I invest.

Also, please send information on: ☐ IRA ☐ KEOGH

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Name

Address

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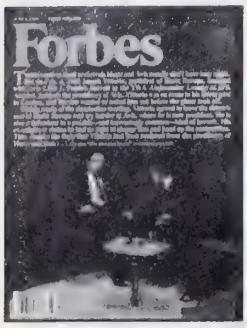
As determined by the Lipper-Mutual Fund Performance Analysis, calculated on the assumption that the capital gain distribution was taken in additional shares.

June 6, 1983
Volume 131,
Number 12



168 *Intellectual Property. Where the venture capitalists collide with corporate America. It's a conflict with a little right on each side.*

41 *Defense: "They just told us to do the best we could with smoke."*

60 *Municipal Bonds. "Spreads are unconscionable. There are so many issues and thin markets."*

39 Airlines:
Too Close For Comfort
Some controllers may have put planes on collision course to win early retirement.

41 Defense:
The Copperhead Missile
Here's a weapon that can't miss. Just send two foot soldiers ahead to aim it.

42 Companies:
First Interstate Bancorp
Franchised banking isn't the answer. Maybe someone is asking the wrong question.

44 Shipping:
The Maritime Administration
Surprise. Uncle Sam is subsidizing 11% of the nation's offshore drilling rigs.

44 Thrifts:
Going Commercial
Business loans may be a perfect fit. If everyone doesn't try to wear the same suit.

45 Streetwalker:
A Hibernating Bear
Tips from Robert Wilson; TV stocks to watch; sons of big guns.

46 Companies:
Komatsu
A Japanese company that has come a long way—with a lot of help from U.S. friends.

52 Companies:
Westinghouse
The spotlight is shining on cable television and robotics. And for once the turnaround might be real.

60 Municipal Bonds:
The Carnival Barker Is Here
Everyone is after tax-free investments these days, and some people might be sorry.

68 As I See It:
Chancellor Geoffrey Howe
Not every European wants another Bretton Woods conference.

73 South America:
What Next?
Some of the world's biggest debtors have invested their money surprisingly well.

82 Companies:
Arrow Electronics
First came the tragedy. Then came the expansion. Next comes the payoff.

98 Numbers Game:
Rules For Changing The Rules
When last year's earnings are not comparable with this year's—and what to do about it.

100 Companies:
Dreyfus
This big mutual fund manager is buying a bank so it can lend as well as borrow.

104 Companies:
Conroy
A Sixties-style conglomerate that's doing surprisingly well in the Eighties.

107 The Up & Comers:
CPI
Say cheese—and count up the profits from running photo studios in 628 Sears stores.

108 The Up & Comers:
Feedback Group
Forget the nation of shopkeepers; there's engineering skill aplenty in Britain. Also: Taco Viva; Great American Puzzle Factory.

116 Technology:
See The Brain In Living Color
There is a new way to look inside the body that leaves CAT scanners in the dark. Also: home medical electronics, soybeans.

126 Who Gets The Most Pay:
Chief Executives Earnings
Surprise. In a period of economic trial and tribulation, this annual survey sees its first $50 million man.

156 Companies:
Sperry
A computer pioneer seems lost in the woods.

161 Companies:
Black & Decker
Selling tools was great when folks were buying tools. But now they aren't. B&D wants to sell small appliances.

82 *Arrow Electronics: "I decided to stare the recession in the face."*

107 *The Up & Comers: "A 20-year-old relationship speaks for itself."*

162 *Taxing Matters: The British do things differently—and they may be right.*

194 *The Funds: Investing is one place where experience counts. Make sure you're getting it.*

162 Taxing Matters:
A Proper British Example
Coping with deferred taxes on both sides of the Atlantic. Also: Not-so-friendly assessors and how to beat them.

166 On The Docket:
Watches That Aren't
Quirks in customs law. Also, the lawyers versus the doctors.

168 Cover Story:
What You Know May Not Be Yours
These days changing jobs can have unpleasant legal consequences. Here's a discussion of what they mean and how to avoid them.

Faces Behind The Figures

180 John Gfeller,
Silhouette Books
180 Carol J. Parry,
Chemical Bank
181 Bjorn Ahlstrom,
Volvo North American Corp.
181 Leone Peters,
Amerivest Group
182 Arnold Aberman,
Business People, Inc.
182 Richard Ringoen,
Ball Corp.
184 Jack MacAllister,
US West, Inc.

190 Statistical Spotlight:
The Technology Trap
These stocks may look high priced. But look again and they seem like bargains.

194 The Funds:
Whose Record Is It Anyway?
Before you buy a mutual fund based on impressive long-term performance, make sure the portfolio manager is still around.

200 Companies:
Transitron
The shooting star that went out, a tale of caution for the Eighties.

Money And Investments

33
What's Ahead For Business
34
The Forbes Index
187
The Forbes/Wilshire 5000 Review

Columnists

203
Ben Weberman
204
Thomas P. Murphy
208
Ann C. Brown
210
Stanley W. Angrist
212
Srully Blotnick
214
A. Gary Shilling

Departments

6
Side Lines
10
Trends
14
Follow-Through
18
Readers Say
25
Fact and Comment
28
Other Comments
31
Fact and Comment II
219
Flashbacks
220
Thoughts

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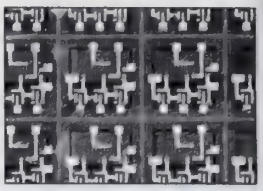
Side Lines

Only the names change . . .

. . . just as the indices reached for an alltime peak and enthusiasm was running high for everything electronic . . . an underwriting group headed by Merrill, Lynch offered 1 million shares at $36 and 25,000 buyers scrambled [to pay] . . . $36 million for 13% of a company whose total assets were $22.8 million, whose sales were only $30.9 million.



A short circuit for Transitron

A rich price, that: Not 10 times earnings but 10 times sales—for a young company with an untested record. Is this an incident in the new issue boom of 1982-83? Nope, the quote is from FORBES of Mar. 1, 1960, nearly a quarter of a century ago. That long-ago article was about a company called Transitron, billed as "the new Texas Instruments." And what did the "new TI" do for its public shareholders? Suppose an investor managed to get a nice round 100 shares of Transitron at the offering. What would he or she have today? Just $588 worth of stock and, considering inflation, a more than 300% loss in potential purchasing power. Keep this item handy for the next time a tipster tells you about a hot new Something-or-other. We revisit Transitron on page 200.

Who earns what?

Make of it what you will, but America's chief executives were pretty well insulated from last year's recession. That fact emerges clearly from FORBES' annual report on CEO compensation that starts on page 126 in this issue. The average CEO salary and bonus among the 808 companies that appear on the Forbes 500 lists came to $449,000 for 1982, as against 1981's $435,000. This isn't a big gain—3.2%—but considering how many of these CEOs were closing plants and cutting dividends, it gives one pause for wonder. Are CEOs rewarded simply for making it to the top? Or is there some connection between accomplishment and remuneration? How, for example, does Warner Communications' Steve Ross justify his $3 million after what happened to Warner's earnings in the fourth quarter?

All told, there were 25 CEOs with salaries and bonuses of $1 million or better last year, up from 15 the year before. (There were a far greater number whose total remuneration was $1 million or better, but this number is a bit misleading because of nonrecurring options or incentive payments.)

Other highlights of our survey:

- Company size and CEO compensation: Average CEO salary and bonus for firms with less than $500 million in revenues was $271,000. It rose to $482,000 for those in the $1 billion to $5 billion range, and to $686,000 for companies with over $5 billion in revenues.
- Routes to the top: Of the 808 CEOs, 122 had finance backgrounds. Banking—but mostly for banks—was runner-up. Other good roads to the top were technical (97) and legal (82). Money, technology, law—those were the big three. MBA students, please note.
- Age: Of our 808 CEOs, only 4 were under 40; 108 were between 40 and 49; 371, almost half, were 50 to 59, and 325 were 60 and over.

Which 500?

An amusing gaffe in the May 23 *Newsweek*. In an article reporting Wall Street's admiration for Fed Chairman Paul Volcker, the newsmagazine added that "The Fortune 500 is equally staunch" in its support. *Newsweek* must have meant The Forbes 500s, because it went on to quote AT&T Chairman Charles Brown as proof of its proposition, and Brown's company isn't a Fortune 500. It is, however, a Forbes 500.

James W. Michaels
Editor

"A TAX-SHELTER PLAN FOR MY EMPLOYEES? NEVER HEARD OF SUCH A THING."

Well, meet QVEC—our Qualified Voluntary Employee Contribution plan.

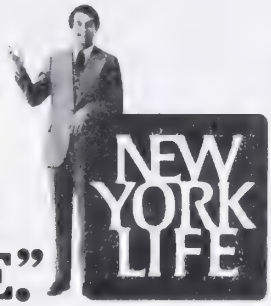
With QVEC, you can offer your employees tax-deductible contributions plus an outstanding return guaranteed up to five full years—all with very little effort or cost to your firm.

Employees can select from a guaranteed interest account, money market or equity fund accounts. Deposits to the interest account are guaranteed the prevailing competitive interest rate until December 31, 1987. Call, or write for the current rate.

While only the first $2,000 is deductible from taxable income, employees may contribute up to an additional 10% of earnings. The income from all contributions accumulates tax free.

Your employees will love you. So will your benefits people or accountant; we do virtually all the paperwork.

Ask your New York Life Group Specialist. Or call us toll-free at 1-800-847-4800. In Alaska and Hawaii, call 1-800-847-4256; in New York State, call collect 212-966-0513.



"ASK ME."

New York Life Insurance Company, 51 Madison Avenue, New York, New York 10010. Life, Group and Health Insurance, Annuities, Pension Plans

How to create your own economic boom no matter where the economy's heading

THIS IS NO TIME for diplomatic niceties: It simply may be *unwise* to consummate a major financial deal without consulting General Electric Credit Corporation.

You are likely to discover a different and perhaps a *better* way of doing business—whether you are in FORTUNE's 500 or aspire to it. Many have.

The examples below are but a few of the financial packages GECC created last year for the needs of thousands of corporations. We tailor-make each package from a vast storehouse of financial options. We will create a new option on demand and can often tell a company what its needs are!

Read on, ask us questions.

An absorbing short story about Scott Paper's relationship with GECC

Increasingly, new business comes from clients who feel we've created attractive financial packages for them in the past.

> *With Scott's permission, we thought you might like to have a peek at the underpinnings of two packages constructed by GECC that increased the efficiency of the paper company's financial resources.*

The first transaction was for a cogeneration plant in Maine that used wood chips as its primary fuel to generate steam for Scott's operations and electricity for sale to others. GECC recommended financing the facility with a structure like a leveraged lease.

Two basic steps were employed for the $91 million project:

1. GECC invested $47 million in the 25-year financing.
2. Separate public offerings of $7 million in long-term tax exempt bonds and $37 million in long-term taxable debt were arranged by a major investment banker.

GECC was then awarded a second piece of business. This transaction, also in Maine, was a leveraged lease financing of a fiber recycling pl that processes waste paper into p for Scott paper products—mu more cost efficient than produc the same products from timber.

The basic steps in the seco GECC financial package were simi to the first, with GECC contribut $13 million in equity and levera lease debt being raised through pu lic offerings.

GECC's work on the second tra action took a mere 28 days to co plete. Two reasons why GECC able to move so fast is that we ha so many options at our dispo and are not overly regulated wh we use them.

ONE GECC PROJECT LED TO ANOTHER WITH SCOTT PAPER. We helped Scott finance a cogeneration energy plant to produce steam and electricity from burning wood chips and coal. Later, we designed a leveraged lease for Scott's fiber recycling plant. Together, the two financial packages constitute a commitment of approximately $60 million.

No pizza pie-in-the-sky talk: GECC's $30 million lin of credit to Eastern Milk for two mozzarella cheese plant

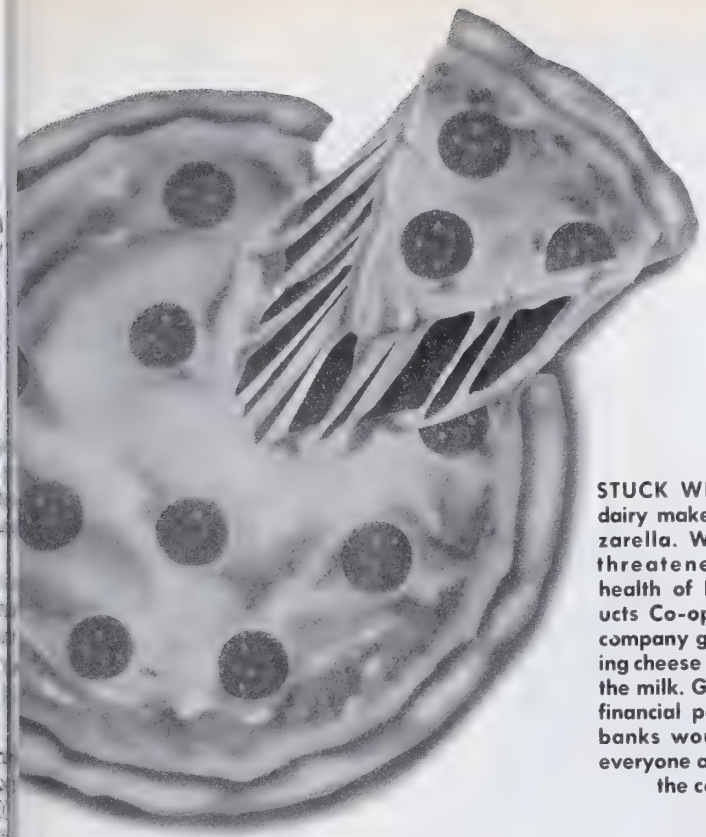
Offhand, you wouldn't think healt cows would give the largest dai cooperative in the Northeast a se ous financial headache. But Easte has to market all of the milk th farmers produce.

It began when the cows of Easte Milk did what healthy cows do spring and summer: give birth calves. Nature and school boar added to the pain by doing wh *they're* supposed to do.

> *Nature increased the her lactation by 25%—normal. T school boards let the kids for vacation—the law. Resu milk demand plunged.*

Disposing of surplus milk was costi the dairy millions a year, requiri additional contributions from 3,500 member farms. The far understandably balked—and me bership began declining when Ea ern got the bright idea of converti milk into mozzarella. They pu chased two cheese plants.

The plants, however, needed to expanded and equipment need modernization. Capital was sho Banks were delaying action on Ea ern's request. Enter GECC.



STUCK WITH MILK, co-op dairy makes 100% real mozzarella. When surplus milk threatened the financial health of Eastern Milk Products Co-op Association, the company got the idea of buying cheese plants to dispose of the milk. GECC put together a financial package—when the banks would not—that had everyone at Eastern, including the cows, mooing.

rst step in the Eastern Milk transtion: We sent a detachment of our ld people to evaluate the company. ıey are specialists in every aspect of siness, including cows!

GECC's experts discovered that ɔspects for Eastern's cheese plants re good and that Eastern could atly improve its borrowing power improving its accounts receivable ling and improving its collection ɔcedure.

We recommended a computerized ceivables program for the dairy. We en provided them with Industrial evenue Bond guarantees of $6.5 llion. And because we believed the ure did look so bright, we extended stern a total line of credit of $30 llion for more expansion. Headne cured.

So if you live in the Northeast, chances are you've enjoyed a pizza pie made with 100% real mozzarella from Eastern milk products. And as a result, cooperative, cows and calves are doing very well indeed.

Sour condominium market o obstacle as GECC finances ne of the largest conversion rojects in California history

hat our competitors in the real ate market often consider a risky y of doing business, GECC thinks as innovative and flexible.

The difference between us is ll illustrated in the Shelter Creek condominium project we recently financed in San Bruno, California. Shelter Creek Company faced two seemingly insurmountable problems.

One, end loan money in California had all but dried up. Two, most lenders were out of the conversion financing market because of lagging sales caused by the first problem.

Undismayed—you will have a hard time working for GECC if you ever are—we backed Shelter Creek because we believed it to be a sound project that would bear fruit.

With our commitment, Shelter Creek Company was able to secure a municipal tax exempt bond issue and provide unit buyers with attractive low interest rate end loan money. GECC created two loans totalling $38 million for the project, large by any standard, even in the best of times.

Shelter Creek Company got its bond issue financing and so was able to compete very favorably with neighboring condominiums because *its* buyers could obtain below-market mortgages.

Four other big deals that demonstrate why GECC is one of America's largest diversified financial services companies

Some highlights. For details on these and other financial packages arranged by GECC, mail coupon.

* * *

Three steel deals, $315 million. A major American steel company decided that leasing, arranged by GECC, provided the best financing terms for its long-term assets.

* * *

Cable TV lease, $22 million. GECC wrote the first tax oriented lease financing in the industry.

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Famous retail chain, $50 million. A floating rate loan secured by accounts receivable, inventories, and real estate guaranteed a leading furniture retailer this line of credit.

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General Electric Credit CORPORATION

Creating Money for Business

Trends

Edited by John A. Conway

What the cities need

Rebuilding America's national infrastructure, some experts say, could cost anywhere from $1 trillion to $5 trillion, sums too huge and a spread too vast for any mind to grasp. When the nation's cities assayed their rebuilding needs, however, they came up with far more workable numbers. The National League of Cities and the U.S. Conference of Mayors asked 809 cities the cost of each of the three priority projects (out of 19 categories) they needed most. Of 2,075 projects, the cities figured 35% would cost $1 million to $5 million each; the 150 biggest projects were estimated at $50 million or more. More than half said they had to have federal or state help to restore streets and roads, wastewater treatment and bridges. But more than half also said they could use their own resources where their priorities were public buildings, sidewalks, traffic control and water distribution and storage. The city survey attempted no overall national totals, and if the list of priorities had been extended, these figures, too, might have reached into the trillion-dollar cloudland. (The U.S. Department of Transportation, for instance, estimates $184 billion over 20 years for rural highways alone.) John Gunther, executive director of the Conference of Mayors, while granting that this canvass is not all-encompassing, said it "gets rid of the 'wish list' idea."

Toy boat in a Rhode Island pothole
Rebuilding may cost less than the experts predicted.

The good earth

Despite the new U.S. subsidies to reduce stockpiles, the wheat inventory isn't likely to shrink next year, partly because of good growing weather and big foreign plantings. The Department of Agriculture says Australia, Western Europe and, maybe, Canada (big exporters) will harvest more than in 1982-83. The Soviet Union and China (big buyers) are expecting large harvests of their own. The number of acres planted in the U.S. this year will be down sharply, the DOA says, but yields will be up: The best land is kept in production and the expected drop in exports should keep wheat stocks at 42 million metric tons, about the 1982-83 record. U.S. subsidies push prices up and encourage foreign growing, and some in the farm world are complaining. But a surge in worldwide demand to cure an abundant harvest is not on the horizon now.

A dirge for diesels

The pocketa-pocketa of the diesel engine will be heard less in the land. Sales of diesel automobiles skidded 48% in the first half of the 1983 model year (through Mar. 31). Steady gasoline prices, high price tags and consumer disenchantment seem the likely reasons. For whatever cause, sales were only 119,000, compared with 229,000 the year before. General Motors suffered the most, a 59% drop, from 138,000 to 56,000, according to *Automotive News*. Volkswagen went down 61%, from 41,000 to 16,000. Mercedes did gain, but only from 25,000 to 27,000. For better news, look at van sales. New small vans soon to be released could revive this market, which shrank from 898,000 sales five years ago to 411,000 in 1982. Chrysler has a mini-van due early next year; GM and Ford will have models in 1985.

The family gambler

Two-way television for shopping, banking, home bookkeeping and other functions still needs some compelling reason to persuade consumers to pay for using it. (More than half of the 2 million to 4 million terminals in homes now are used primarily for video games.) A Connecticut consulting firm, International Resource Development, has an idea it thinks might do the trick: gambling. "Gambling services may be the answer to get consumers to access teletext and videotex," says researcher Dave Ledecky. Bettors now get their dope from newspapers and then bet either at the track, at off-track betting parlors or with illegal bookies. "The use of teletext and videotex could result in one-stop gambling," Ledecky says. Given the human craving for fighting the odds, it sounds like a promising hook for "interactive TV," but its day may be a long while dawning. Off-track betting is legal in only three states: New York, Connecticut and Nevada (where legalized bookmaking means anything goes). New York's off-track betting parlors (which enjoyed a "handle," or betting total, of $1.5 billion last year) have tried to have wagering extended to include, for instance, other professional sports, but so far without success.

Who pays the gas tax?

When the nickel-a-gallon gasoline tax increase was levied on Apr. 1, motorists apparently picked up most of the tab—and then some. Gas prices jumped an average 8.4 cents a gallon at the pump in April, and California oil-price expert Dan Lundberg says a survey of 17,000 stations shows the increases could hit a dime very soon. Retailers, it seems, have been caught between competition (some stations are selling gas at only a penny or two over cost) and the major oil refiners, most of which raised wholesale prices almost 10 cents last month to make up for the market weakness of the last six months. "I can honestly say I don't know of any station that hasn't passed it [the tax increase] through to the consumer," says Vic Rasheed, executive director of the Service Station Dealers of America. Spring supplies are always tight, but the National Oil Jobbers Council says this year is particularly bad because flooding in the Gulf states cut some oil transmission lines. Theoretically, competition should be forcing oil dealers, refiners

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and producers to absorb some of the tax, and the Independent Petroleum Association of America insists that they are. But Lundberg's survey showed retail prices climbed from an average $1.12 a gallon in March to about $1.20 in April. Maine was particularly hard pressed, says Rasheed. That state passed its own 5-cent tax as well, and wholesale prices there went up another 3 cents to 5 cents. In spite of all this, the Energy Department continues to forecast a steady drop in gas prices until summer 1984. Why? It cites declining oil prices and slack demand.

Businessman's blessing

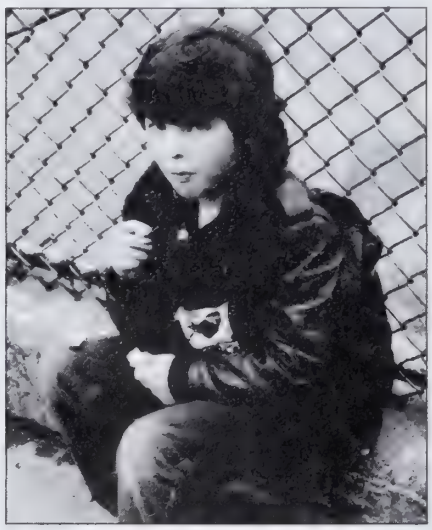
Reversing its field, the U.S. Chamber of Commerce will endorse some Democrats in the 1984 congressional races. Last year the chamber drew fire by endorsing about 100 GOP candidates for the House and Senate, but no Democrats (although it did back some in primary races). Next year, however, according to Senior Vice President Richard Breault, the chamber will automatically give its blessing to any incumbent with a 70% or better pro-business voting record, contingent on local business support, regardless of party. The chamber's new chairman, Edwin Dodd, who is chief executive of Owens-Illinois, notes that "the philosophy of Republican candidates more often than not has been consistent with that of the chamber." But, he adds, "there are many, many fine Democrats."

Behind the numbers

Those "10% unemployment" statistics mask what happens to the people behind them, according to a new study for the New York-based Conference Board, which shows that 24% of all wage earners were unemployed at least once during the last year. The survey of 5,000 families, the Conference Board says, also shows average unemployment was 19 weeks, longer than in any previous recession. Among those unemployed during the last year, 44% were husbands, 32% were wives and 35% other family members or singles. In about 10% of the homes, more than one person was out of work. Unemployment was higher than average among those under age 55 and those earning less than $25,000 a year. Rates were highest in the Midwest, Rocky Mountain and Pacific Coast regions. The analysis also showed that, after inflation, per capita income rose only 0.6% a year since 1978, compared with an annual 2.4% during the 1970s.

A chaw for children

Candy will harm teeth and chewing tobacco will make gums recede, but children like both—at least in Georgia. So says Dr. Steven Offenbacher, director of Emory University's new periodontics research facility. A recent study of 500 Atlanta elementary and high school boys showed that 15% used chewing tobacco regularly and 11% regularly used snuff. The study shows that 20% of the boys, aged 10 to 16, used "smokeless tobacco" almost daily (and many of the younger ones mixed their chaw with bubble gum). Another 24.5% reported they had tried chewing tobacco or snuff but were not regular users. Offenbacher reports the Atlanta children were four times as likely to chew or use snuff as to smoke. (Only 4.5% of the group used cigarettes.) About half the boys using snuff or chewing tobacco had some gum recession, compared with only 19% of the non-users. Offenbacher says the typical user is white, active and athletic, and peer pressure is very heavy. Coaches may not condone but often don't condemn tobacco as long as it isn't smoked, he says.



Bubble gum in action
Something new in chewing.

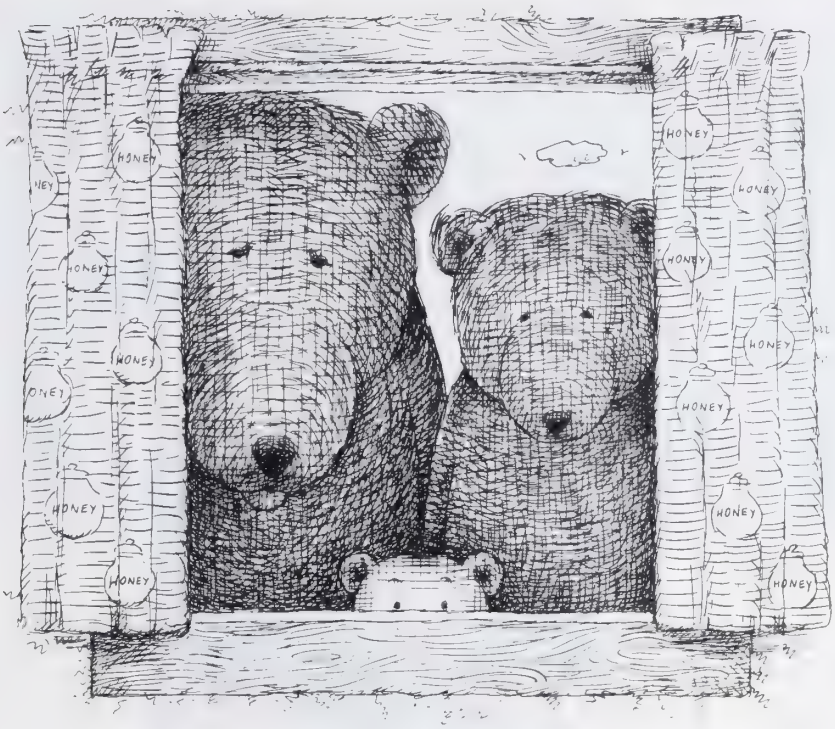
Protecting invisible exports

With industrial economies swiftly becoming service oriented, a new problem arises—assuring that world trade in services is not hampered by protectionism. A London think tank, the Trade Policy Research Centre, has created an international coalition of executives and former government officials to push for open trade in banking, insurance, shipping, communications and other services. "Over the last few years, the service sector has had its consciousness raised," says Joan Spero, vice president of American Express and former U.S. ambassador to the U.N. Economic & Social Council, an adviser to the new group. The coalition, chaired by former U.S. Trade Representative Robert Strauss, includes the U.S., Britain, Canada, Japan, Malaysia, Italy and Germany. It not only will examine barriers like prohibiting leased telephone lines and requiring TV commercials to be filmed domestically but will try to develop a theory of international trade in services (calculated by Britain's Committee on Invisible Exports at $500 billion, or 20% of world trade, with the U.S. generating 20% of that). Convincing the rest of the world won't be easy. Last year the 88 contracting parties to the General Agreement on Tariffs & Trade rejected a U.S. effort to put services on the agenda. Instead, GATT will consider the proposal once again in 1984.

Helping the "haves"

The states may spend $149 million a year on gifted students, according to the National Association of State School Boards, but a new group of businessmen says that only 2 in 5 gifted children get any special training, and only 1 in 20 ever achieves his or her full potential. So the National Business Consortium for Gifted & Talented Children in Washington, D.C. hopes to survey each of the nation's school districts in the next year to see what is being done for gifted students. "The fact is that no democracy can survive to help any members of the community unless the talents of the very brightest are put to the best use of the community," says former Congressman Frank Ikard, president of the group. The consortium plans to spend $500,000 this year and increase its budget to $3 million in three years, all from private funds, Ikard says. Members are prepared for charges of "elitism," but they do have President Reagan's blessing. Gary Jones, U.S. Under Secretary of Education, says "educators have focused more on the 'have nots' than on the 'haves.' That may be because the gifted and talented are perceived as being able to take care of themselves."

Just right.



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Follow-Through

Airborne

For 86 years Rhode Island's Outlet Co. was a retailer. But in 1922 as a sideline it opened a radio station atop its Providence store. One station led to another, and by 1979 President and CEO Bruce Sundlun was calling Outlet a group broadcaster (FORBES, *Follow-Through, Nov. 10, 1980*). That autumn he sold off 91 Outlet and specialty stores and went hunting for an "upstream merger."

Then came two setbacks: Outlet lost $18 million in 1981 because of the discontinued retail operations, and then a proposed acquisition by Columbia Pictures fell through when Coca-Cola bought Columbia. An alternate merger began to look not only desirable but imperative.

Outlet's Bruce Sundlun
At last, an "upstream merger."

Last year, however, Sundlun sold off the rest of Outlet's losing retail stores for $13 million and Outlet's future began to look rosier. It earned a record $18 million, $11.3 million of it from broadcasting. With five VHF television stations, one each in the hot Orlando and San Antonio markets and all in the top 50 markets, plus its radio stations—the all-news WTOP in Washington, D.C., FM stations in Philadelphia, Detroit, Providence and Los Angeles, and an FM station to come—Outlet's broadcasting would have carried it comfortably. Outlet was, according to the air-minded World War II bomber pilot, strong enough to fly alone. "There's no compulsion for us to merge," he said only in April.

But he had not ruled out merger, and just before the company's stock split 3-for-2 in early May, Rockefeller Center, the energy and real estate concern of the Rockefeller family, offered $68 each for Outlet's 3.6 million outstanding shares. Sundlun happily accepted. The deal has yet to be approved by the Rockefeller and Outlet boards, Outlet shareholders and the Federal Communications Commission, but it looks as if it might go through without a hitch. Rockefeller Center had given up its effort with RCA to start a cable television channel at the end of March, after it lost $34 million, but had kept looking for an entertainment subsidiary.

Sundlun has reason to be happy. He controls 10% of Outlet's stock, and, at $68 a share, his own 42,259 shares are worth about $2.9 million. The deal would line his pockets and allow him to move up from Outlet president and CEO to chairman and CEO. So he could go on with his plans. He would like to add two UHF TV outlets and three more FM radio stations, all the Federal Communications Commission will allow. (The FCC would force Outlet to sell its Providence radio station to another buyer.)

He is not as interested in AM, and cable is absolutely out. "It's not a profitable business," he explains. "Payouts on cable are running 12 to 15 years, there's no programming, and there was a recent Supreme Court decision that requires cable to pay copyright fees." Despite the fact that 25% of U.S. households are now wired, he says, cable programming has yet to be tracked by the Nielsen ratings and is no threat to traditional network affiliates. "We operate in two markets that are completely cable," says Sundlun, "and it has *improved* our business because the cable must carry our stations." After the Rockefeller-RCA cable fiasco, Sundlun's new bosses can only say amen.

When is profit profit?

Earlier this year, FORBES *(Mar. 28)* set out to unravel the reasons Cleveland's Broadview Financial, Ohio's second-biggest S&L with $1.9 billion in assets, fired its auditor, Peat Marwick Mitchell, last fall. A prime cause, Broadview had told the Securities & Exchange Commission, was "disagreements with respect to income recognition." Speculation centered on Broadview's real estate. Last year, it seems, Broadview began to enlarge its stakes in the real estate deals it was financing, and apparently hoped to sell those interests for immediate profit, rather than spreading them over the life of the project. Without those quick profits, would

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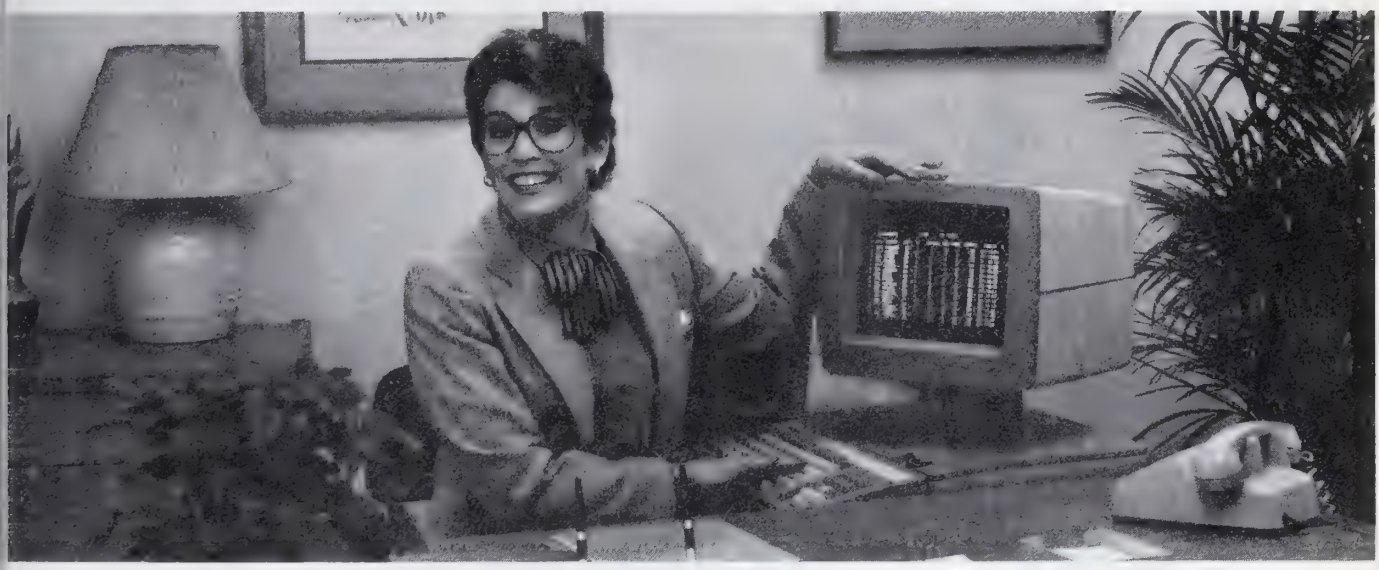

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Follow-Through

Broadview have risked having its net worth fall below the limits required by bank regulators? Peat Marwick, in fact, had warned of this in the Cleveland S&L's 1981 annual report. Broadview's 1982 report notes that the net worth figure is indeed now $10 million below requirements. Its new auditor, Deloitte Haskins & Sells, while it did not qualify Broadview's new statements, underscored this slippage in an "emphasis paragraph." The report added that the Washington watchdogs had taken no action.

What it boils down to is that Peat Marwick seems to have been right all along, and Broadview now admits it. "At the time, we felt we were right and Peat Marwick felt they were right," says Broadview's treasurer, James Goehler. "It ended up that they were right."

You can't hide

Radio paging is becoming a business with a capital beep. In 1969 there were only 32,500 radio-controlled beepers in use. By 1979, 800,000 such units were at work, with sales reaching $300 million that year. Bulky, rachitic early models shrank and got more sophisticated, and for $16 a month a cross section of society could get the message (FORBES, *Sept. 3, 1979*). Motorola had perhaps 70% of the equipment market, trailed by Harris Corp., GE and the Japanese.

Today beepers have become perhaps a $750 million-a-year service (equipment will add another $125 million). Metromedia has acquired five paging companies and now is possibly the nation's largest operator. MCI last year bought Western Union International's Air Signal. It has 80,000 pagers on its rolls now and plans to double that number within a year. With about 2 million units in use (for doctors, repairmen, and a host of other users), paging has been growing annually at about 35%, virtually without promotion. With the price at $20 to $30 a month for the paging service, promotion is on the way. MCI plans to go after salespersons, lawyers and the like in 52 cities. A national paging system is on the way, too. MCI, Metromedia, American Express and Dallas-based Communications Industries have formed a joint venture that will ask the Federal Communications Commission for approval to page you long-distance in any one of 150 American cities.

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He prefers Rickover

SIR: How can you give Navy Secretary Lehman high marks *(Fact and Comment, May 9)*? He suggests a freeze of the Navy personnel pay—great for morale. Our Congress votes themselves an increase. He contemplates two new carrier groups—at odds of 180 degrees from Admiral Rickover.

I'll take the Admiral's credibility and experience.
—Abe M. Weiner
Portland, Ore.

Don't punish savers

SIR: Re "If Social Security's Horrendous Hemorrhaging isn't effectively staunched by what the Anemics in Congress have come up with, a bitterer pill will follow: a Social Security means test" *(Fact and Comment, Apr. 11)*. I would like to comment [on that possible solution].

Since I began making my "contributions" to Social Security in 1937, at age 18, I have worked and saved, thanks to a good wife, and look forward to retiring when I am 65, which will be in 1984.

Should I now be penalized when I am about to collect on my "contributions" because my wife and I scraped and saved, and now have more income from investments, etc., than others who were in the same situation as we were, but did not save?
—Leo G. Kulovitz
Potomac, Md.

No.—MSF

Women decide 'em now

SIR: Fie on you! Pshaw! Grumph!

Those are the sounds of a female "caterwauling" in rage upon reading that it was the male version of that activity in the early Seventies which "halted the hemline descent at the knees" *(Fact and Comment, Apr. 25)*. That was the first time women, not male designers or newspaper publishers, decided where their own hemlines would be. That decision will never again be relinquished either, you can be sure.
—Carole B. Dotson
Merion, Penna.

Never again?

Church and business

SIR: "How many divisions do they have?" *(As I See It, Apr. 25)* rightly perceives a dichotomy between church and economic interests. It's been with us for ages. The problem is to prevent the differences from degenerating into further confrontation and hostility rather than being transformed into a healthy and creative tension.

You appear shocked by Pope John Paul II's priority of "labor over capital." Yet, who among us would not place human worth over monetary interests? But is human worth best

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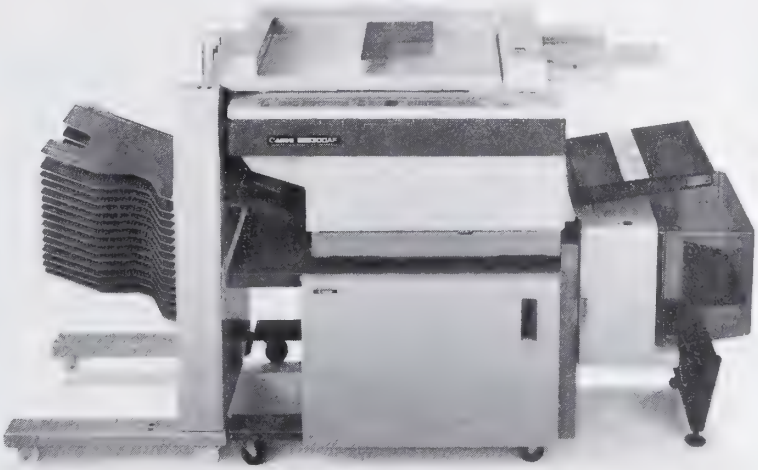

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Readers Say

served under a [system] which restricts individual freedom in the name of improved economic circumstances?
—*Robert J. Jurgen*
Executive Director,
Ethics Consultants Associates
Fripp Island, S.C.

SIR: If there is no place for reflection on a just society, then we are turning our backs on any kind of helpful criticism of our system.
—*The Rev. John L. Scott*
New York, N.Y.

Split-adjusted estimate

SIR: In the table "Where the analysts are becoming less optimistic" *(Statistical Spotlight, Apr. 25)*, the Sept. 30, 1982 earnings estimate for Masco was not split-adjusted. The correct change in the recent estimate versus the Sept. 30 estimate is –7.5%.
—*Stephen Potts*
New York, N.Y.

Less nuclear, more coal

SIR: MSF states in Fact and Comment *(Apr. 11)* that anybody who thinks oil and coal will very long be out of style isn't thinking. The unfortunate demise of the nuclear power industry seems at hand in the U.S., and this will certainly give coal a real boost.
—*Merlin S. Gagle Jr.*
Chairman,
American Coal Resources, Inc.
Middlesboro, Ky.

Commissions are higher

SIR: The article "The hook" *(Nov. 8, 1982)* says that State Farm agents get 2% commission on personal automobile policies, compared with an industry average of 10%. State Farm agents could not exist on a 2% commission income because the numbers involved would make it physically impossible to service a book of business of this volume in order for them to support an average $30,000 annual commission income.
—*Harold C. King*
Dohrmann-King Co.
Stockton, Calif.

Reader King is right. The average commission for State Farm's personal automobile policies is 10%.—ED.

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Fact and Comment

By Malcolm S. Forbes, Editor-in-Chief

NOW WHY DO YOU SUPPOSE THE DEMOCRATS HAVE CEASED

their sneering references to Reaganomics?

COMBINE THE TAX CUT, LOW INFLATION, SOARING STOCKS,

uptick in housing values, the stopped job-drop, tax refunds by the $millions and the current surge recorded by assorted polls of Confidence—and what do you have? Right.

ONE DISASTROUS BY-PRODUCT FOR A JOB LOSER

is losing the health insurance coverage that went with the job.

Given sky-high, out-of-control medical costs these days, any accident or illness means a wipeout of whatever resources most temporarily unemployed may have accumulated for the proverbial rainy day. Job losers who are eagerly, frantically job-seeking are more prone to passing bugs. Stress makes for illness susceptibility.

This loss of health coverage is iniquitous. The problem should be tackled by the Congress, in cooperation with the Administration, to develop a solution that's feasible and affordable.

What's unaffordable is this potentially disastrous fallout from no-fault joblessness.

WHO SAYS THE KREMLIN HAS NO SENSE OF HUMOR?

Moscow warns that our efforts in El Salvador to stem the influx of military weapons to hard-core Communist cadres in Central America will lead to a "new Vietnam."

No mention of the U.S.S.R. in Afghanistan. Slipped their minds—they wish.

How do you suppose the Commissars keep from chuckling out loud at the fiercely Noisy Ones in the U.S. who scream that Red arms for Central American rebels are a figment of the Administration's imagination? And they didn't change that tune even after four Libyan planes, forced to refuel in Brazil on their way to Nicaragua, were found to have 52 tons of arms.

Qaddafi said the planes held only medical supplies. Come to think of it, that is the type of medicine Qaddafi prescribes for all his opponents, especially the U.S. The bulk of Libya's vast stashes of military weapons is supplied by Russia for cat's-paw use everywhere they can find dupes and dispatch troops to make trouble.

In this case, the humorless are not the Russians but the righteous duped right here.

THE BISHOPS BOMB OUT

I guess it's too much to expect those who have devoted their lives to preaching morality and precise dogma *not* to come down piously against nuclear warfare. (By the way, who's for it?)

Since those atheist Reds won't listen, the bishops seem determined that at least the Good People should cease making any more of these ungodly weapons of destruction. I suppose they stopped just short of making it a cardinal sin because, after all, they're only bishops.

But what a potentially dangerous thing they're doing. It

is only because this country is abreast of the state of the nuclear warfare art that the U.S.S.R. hasn't taken over Western Europe and that its Cuba-esque minions haven't fanned out over most of Africa, Central and South America. Religious clout in Russia is nonexistent. Look what happens to the Church in Poland when preaching is politically threatening.

Wouldn't our refusal, on "moral" grounds, to keep up with nuclear warfare capability reduce the life expectancy of religious freedom (or any other freedom) for most of the rest of the world?

The bishops' letter may help a bit to get the Administration moving along the SALT path. But aside from that possible slight impact, their letter is really unreal.

MOST EVERYONE WANTS TO DO

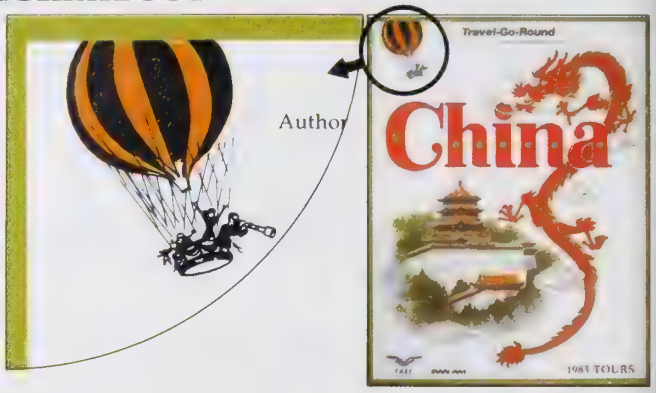
what's fair, right and good, but knowing what is is often the tough part.

DELIGHTFUL TURNABOUT

When son Tim and I, along with four friends, motorcycled and ballooned through China a few months ago, getting permission to free-fly the balloon was nearly impossible. "Reasons of security and safety" were always cited by authorities.

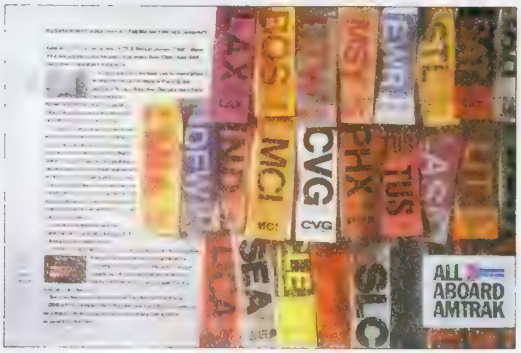
The other day there arrived this brochure from the China International Travel Service—highlighting a balloon, with one of the passengers shown spying through an elongated spyglass, yet!

I guess our unauthorized flight over Peking (when the tether rope slipped and we landed unintentionally on a military reservation) did a little bit of what we hoped it would do—namely, introduce the sport of ballooning and the fun of free flight to the wonderful people and wondrous land of China.



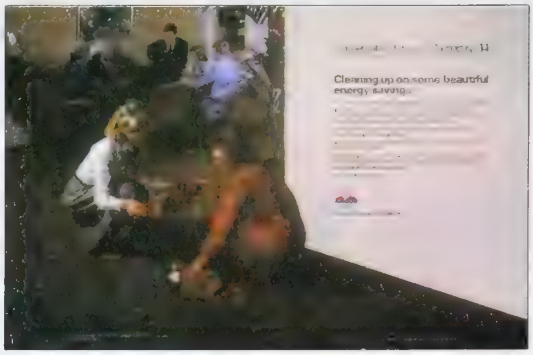
TWO MOVING ADS AND ONE DEMEANING ONE

No wonder Amtrak is succeeding in the impossible task of putting passenger rail traffic on the track. Look at these moving ads. They're enough to make enough folk climb aboard to keep the 23,000 miles of rails carrying trains for people. Without Amtrak's on-the-ball management, such trains by now would be virtually extinct.



As for this Amoco Chemical spread, reader John Heitman's letter says it all:

"This has to be one of the worst examples of what not to run in the Eighties. The idea of secretaries fetching coffee has been sensitive for a while, but these secretaries are real bumblers! They must squat to pick up the spill, yet are required to look like high-fashion models (which they are). Meanwhile, the corporate lions are totally indifferent. There are only four coffee mugs for the six in conference. Do two not care for any? Do the girls have to make an extra trip because the serving tray is so small? Amoco would like the reader to think their wonderful chemicals provide you with a wonderful carpet. The impression I get is of some perhaps socially irresponsible people running a chemical company who can't control their ad agency!"



FORBES' STRIKING COVER THIS ISSUE ISN'T THE FIRST

time that we've run the text of editorial matter there—though in the memories of everybody else here, it is.

In 1936, in the issue subscribers received just prior to the presidential election, this editorial by FORBES' (and Forbeses') founding father, B.C., covered the cover. It wasn't his idea to run it there. With the flaming partisanship of a political-minded 17-year-old, I urged, pleaded, persuaded Dad that the election was so important that this magazine should contribute its mighty mite to influencing the result.

At the Lawrenceville School, I was campaign manager for the Republican presidential candidate, Alf Landon. He was a landslide victor when our preppie ballots were counted.

I like to think that Dad's quite untypically, intensely emotional, adjectival outburst helped Alf carry Maine and Vermont.

* * * *

Speaking of editorials, I don't agree with the one on page 31.

Forbes

Americanism or Rooseveltism?

By B. C. Forbes

THE fundamental issue of the Presidential campaign is extremely simple—and extremely important:

Do we want to preserve America and Americanism, American institutions, the American form of government, American democracy, American freedom, American opportunity, the American economic system which raised this land to first place among the nations of the world?

Or do we want Franklin D. Roosevelt to turn America topsy-turvy, to emasculate or annihilate the Supreme Court, to put American business and industry into a strait-jacket, to bring agriculture under political subjection and regimentation, to exercise autocratic rule over workers and all other citizens, to arrogate all power to the Chief Executive, to establish a Napoleonic Dictatorship over, not "sovereign citizens," but over a nation of serfs as impotent to assert themselves and their rights as are Russians under Stalin, Italians under Mussolini, Germans under Hitler?

President Roosevelt having gone as far as he tried to go towards setting himself up as a Dictator, without having received any mandate whatsoever for such anti-American action, how far would he feel warranted in going were such conduct endorsed by the people? How far would he *not* feel warranted in going?

All who want infinitely intensified Rooseveltism and Russianism should vote for the present ambitious occupant of the White House.

All who cherish America and what America heretofore has stood for, should vote for Landon and the true-blue Americanism his Administration would restore and preserve for us and our children.

TWICE A MONTH NOVEMBER 1, 1936 TWENTY-FIVE CENTS

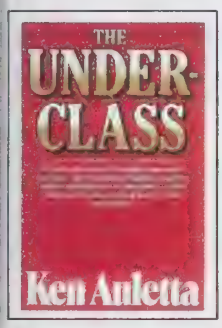
OVERSIMPLIFICATION

If oversimplification enables us to understand what we otherwise wouldn't grasp, it's a virtue.

WHEN YOU SAY

of a potential successor, "but he's young," instead of, "good, he's young," your departure needs hastening.

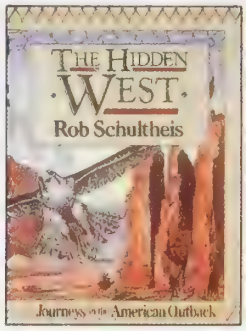
BOOKS



● **The Underclass**—by Ken Auletta (Random House, $17.50). Auletta is one of the most trenchantly understandable, understanding commentators on and of our times. Here he deals not with the underclass in the context of "the poor" but with society's 9 million (his estimate) dropouts—violent preyers on city streets, drug pushers and junkies, juvenile delinquents, deranged vagrants and bag ladies.

Ken Auletta doesn't offer quick solutions, pointing out that welfare as now constituted and administered is often more corrosive than corrective. Astonishingly, the most successful transformations have come from programs fueled by fervor for long-sneered-at "middle-class values"—schooling, hard work, a sense of right and wrong, family life. His balance is extraordinary for a work of such hard-hitting perception and heart.

Excerpt: *If dependency on welfare and government support causes violence, as Daniel Patrick Moynihan once suggested, why do West Germany, Great Britain and Japan, more advanced welfare states than our own, have so much less violent crime? If poverty is the cause, why is random violence so much more widespread in affluent America than it is in many more destitute nations? Why does Mexico have one of the highest murder rates in the world, while India does not? If governmental neglect and unemployment are the sole cause, why did crime rise in the Sixties when federal aid to the poor rose and unemployment dropped?*



● **The Hidden West**—by Rob Schultheis (Random House, $11.50). The author gets off on getting off the beaten paths across Colorado's stunning landscape. These mutations-of-Kerouac-style essays tell of torturous hikes into almost inaccessible valleys and untrod climbs that I don't think many readers would want to duplicate.

Excerpts: *Someone was kayaking the Grand when he met a lone Hopi Indian man on a beach where the Little Colorado flows into the canyon. The Hopi's face was painted black. "I'm waiting here for a vision," he told the kayaker, "but you're not it." . . .We didn't make it to the highway till after dark, and it was another hour east to Kayenta, where there was a café open. We bought Navaho tacos there and mutton stew and coffee. The food tasted better than any mystery. I didn't care if I never saw Navaho Mountain again; that short-order greasy spoon was shrine enough for me.*

Other Comments

Often comments by others stimulate, irritate, abuse or amuse this editor's mind.–MSF

from *Barron's*

Up & Down Wall Street

—Alan Abelson, editor

. . . The market, fresh from another stellar performance, poised on its lofty perch to spring to still more elevated peaks, was suddenly confronted by an event as unexpected as it was terrifying: the discovery by *Business Week* that something was happening in the stock market. We're not ashamed to admit that when we espied the cover of the publication, our blood ran cold, our cheeks grew hot, our hands shook uncontrollably. For eight wonderful months, the stock market had gone from strength to inspiring strength, trampling caveats and cautions in its path, flicking off the dire counsel of economists, undaunted by the taunts of technicians, confounding correctionists by the score.

All this time, millions cheered and grew more affluent. And all this time, to the relief of bulls old and young, large and small, raging and Ferdinandish, *Business Week* peacefully slept. Inevitably, there was a leak, and then some fink tipped *Business Week* off. Lo and behold, McGraw-Hill's great flagship woke with a start, piped all hands out of the holds and ran up a cover story heralding "The Rebirth of Equities." Congratulations poured in from the moon—the only other place that had missed the bull market. The reason for the "Rebirth" in the title, incidentally, was that the publication had proclaimed "The Death of Equities" in another cover story back in 1979.

At that time, it assigned a copyboy to drive a stake into the market's heart. Unfortunately, the copyboy was a vegetarian and unfamiliar with stakes, so he lost that fearsome weapon on his way downtown. As a happy consequence the market, poor beast, was able to crawl away and has survived these past four years undetected by the magazine's millions of minions. Subsequently, the copyboy was promoted to reporter, and if he continues in his fumbling way, we venture he'll make editor someday.

As it was, the news that *Business Week* had rediscovered the stock market sent tremors of trepidation tripping through The Street. Then came the real shocker—not only had *Business Week* rediscovered the stock market, but it was bullish! Panic set in, widows wept, orphans wailed and sell orders flooded the market with a mighty rush. It was, we can say without fear of contradiction, a very near thing. Very near thing, indeed. . . .

Tax Cut Impact

The average U.S. worker will spend 2 hours and 40 minutes each workday in 1983 earning enough money to pay federal, state and local taxes.

However, according to a new report by the Tax Foundation, that is less time than was spent last year. Exactly 1 minute less.

—*U.S. News & World Report*

Cure Carefully

The newly medically uninsured are people who lost employer-paid coverage when they lost their jobs. Their number may exceed 10 million, and their plight has stirred Congress to consider relief plans.

But could it remain temporary? Today's emergency relief will be hard to withdraw. Though "free market" approaches to the containment of health costs are now in vogue, there is reason to believe more federal regulation might bring costs under control more sensibly. Congress should respond to the immediate need, but with full understanding of the implications and a willingness to look further ahead.

—*New York Times* editorial

Bank Note

New York State Police arrested John Kronau, 25, of Avrill Park, New York, for disorderly conduct after he frightened a bank teller at the Troy Savings Bank in East Greenbush. Kronau allegedly handed the teller an envelope and a note that said: "Don't be alarmed. This is a bank deposit. Please take the money out of the envelope and put it in the bank."

—AP, in *National Lampoon*

A little flattery will support a man through great fatigue.

—President James Monroe, *Presidential Anecdotes*

Momentary Heroics

Heroism, the Caucasian mountaineers say, is endurance for one moment more.

—George Kennan, *OMNI*

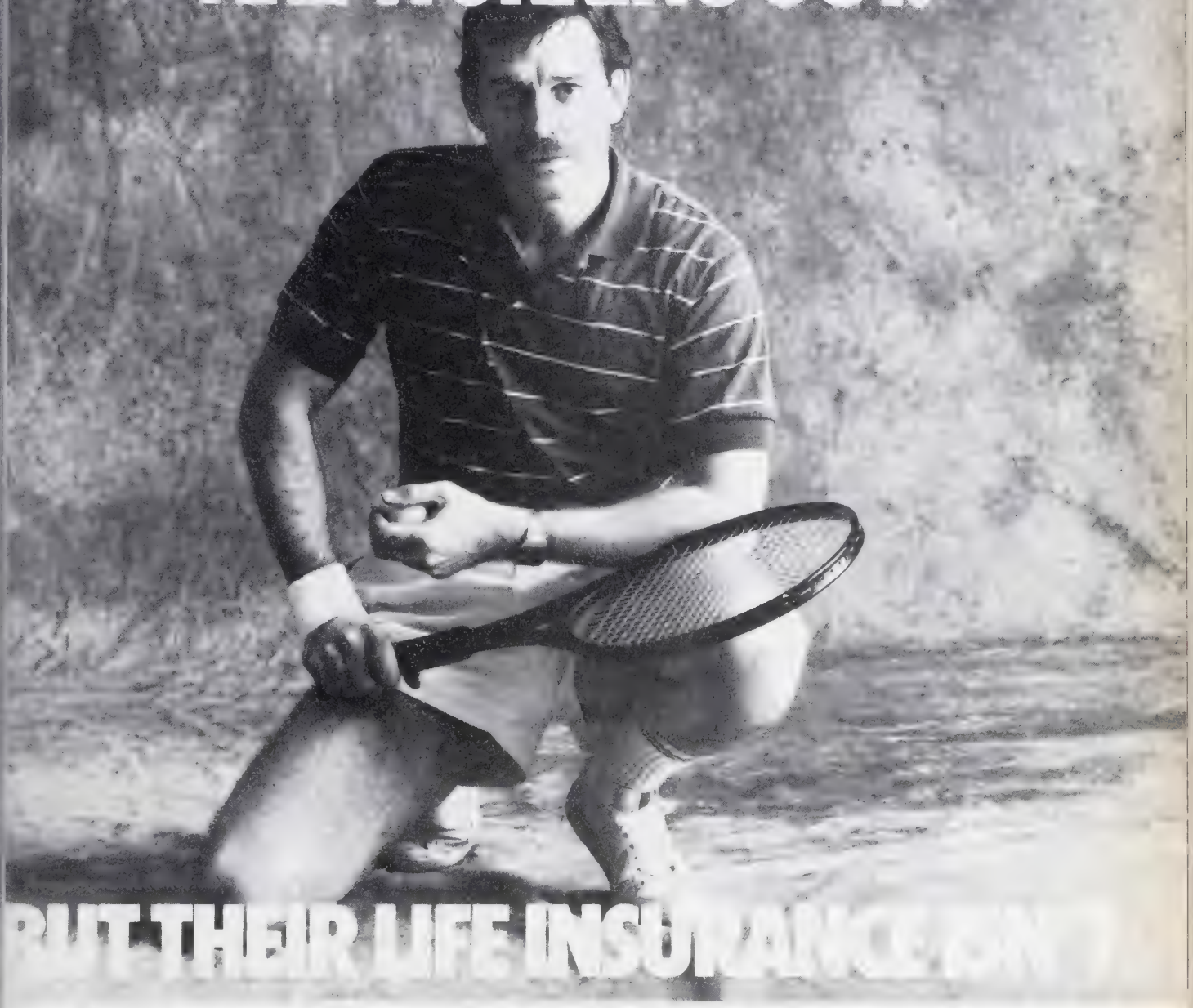
Drawing by Forges, © 1983 The New Yorker Magazine

Unskimpy Suit

Chattanooga, Tenn.—Days Inns of America Inc. plans to ask a judge to review a jury verdict awarding $25,000 to a man who claimed he permanently injured his neck after walking in on a "skimpily clad" woman in a motel room. James L. Hardy Jr., 56, of Nederland, Tex., sought $150,000 in damages from the Atlanta-based motel chain, saying the company's East Ridge property was negligent for giving him the key to the wrong room and exposing him to the nightgown-clad woman in 1981.

—*Lake Sun Leader*, Missouri

TODAY 55 MILLION AMERICANS ARE WORKING OUT.



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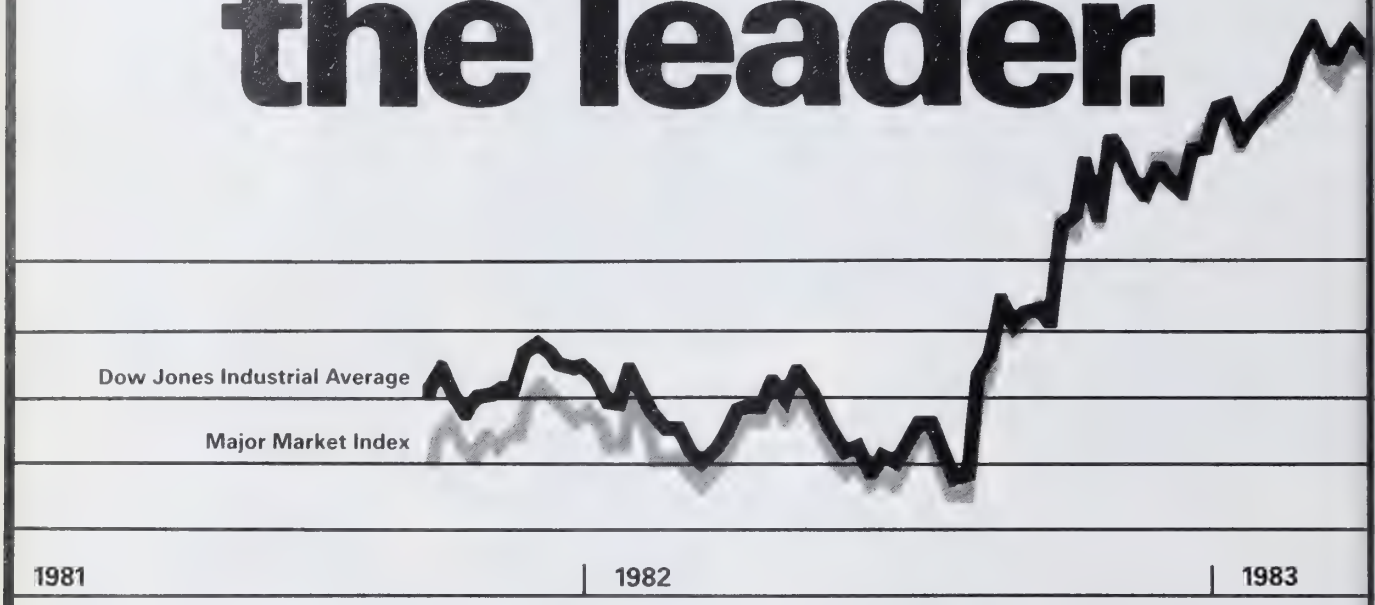


There can be no assurance that this degree of correlation will continue in the future.

The American Stock Exchange introduces options on the Major Market Index. The 20-stock index that mirrors the market.

The Major Market Index was created for the investor who wants to work with a reliable, easy-to-follow index; an index made up of 20 blue chip stocks that together are widely viewed as reflecting the market for major U.S. Industrials.

We compared the Major Market Index with the Dow Jones Industrial Average over an 18 month period. Result? Our index closely tracks this leading market indicator. It makes sense to trade options on an index that mirrors the market.

Index options provide new investment opportunities. By using leverage to profit from anticipated changes in the market's direction. By hedging against a decline in the market as a whole.

You can trade index options through your regular stock options accounts. Of course, index options, like all investments, involve risks. Up to the full amount of the premium paid for puts or calls may be lost in a brief period if the investor is wrong.

For a discussion of the uses and risks of index options, ask your broker or the AMEX for basic options and index options disclosure documents.

(XMI)

The Major Market Index Option

The index that mirrors the market.

AMEX

American Stock Exchange, Inc., 86 Trinity Place, New York, New York 10006.

Fact and Comment II

By M.S. Forbes Jr., Deputy Editor-in-Chief

CONGRESS BLOWS IT WITH THE IMF

Legislation to increase substantially the U.S. contribution to the International Monetary Fund is sailing through Congress.

Too bad, because Congress and the Administration have never come to grips with the fundamental questions involved. If they had, the IMF replenishment would have gone the way of the permanent oil shortage. Instead, the U.S. was stampeded by cries of "default," "collapse," "another 1931."

There are some key questions that have never been answered, much less addressed:

- Are increased IMF resources the only, or even the best, way to prevent a catastrophic string of bank failures?
- Are the added resources necessary to prevent countries from defaulting?
- Will the additional money promote sound economic policies in troubled countries?
- Is boosting the IMF's role in international lending conducive to expanding world trade and reducing protectionist pressures?
- Will it encourage sound, productive private lending overseas?
- Will more IMF lending reduce inflationary forces?

The answers are not encouraging.

BANK FAILURES. You don't need an IMF to prevent these. That's what central banks, like the Federal Reserve, are for—to act as lenders of last resort to institutions with serious, temporary liquidity problems.

GOVERNMENT DEFAULTS. If a Mexico needs a quick assist, the Fed or some other government agency can make a fast loan, as happened last summer. Bank regulators here and abroad are quite capable of twisting the arms of commercial banks to maintain or even increase loans to distressed, but important borrowers. The Fed did that, too, a few months back.

THE IMF AS DISPENSER OF CASTOR OIL TO FINANCIALLY SICK NATIONS. First, this agency often prescribes the wrong medicine *(see this column, Apr. 11)*, which needlessly prolongs a patient's agony and actually retards recovery. Second, the IMF's "seal of approval" that a country is putting its house in order can be signaled as easily by a $1 million loan as with $1 billion or $5 billion.

WORLD TRADE AND PRIVATE LENDING. A major problem has been and will be again the notion that so-called sovereign risks (i.e., governments and their agencies) are safer bets than private sector borrowers, not because they're sounder enterprises economically, but because they are more likely to get bailed out. Expanding the IMF will only encourage this trend.

Fund bureaucrats don't bother to distinguish between risks within a country. Either a country is "good" or "bad." Which is absurd. Five years ago the U.S. dollar was the sickest currency among industrial nations. Did that mean IBM and GE were bad credit risks? In the 19th century the U.S. as a whole wasn't labeled a no-no to foreign investors just because certain bondholders lost their shirts when a particular railroad went broke.

It's no coincidence that perennial IMF borrowers are usually countries that most stifle their private sectors.

PROTECTIONISM, INFLATION AND OTHER BAD THINGS. The IMF's obsession with balance of payments as the ultimate thermometer of a nation's health unwittingly encourages protectionist anti-free-trade measures. The IMF really doesn't care how you reduce your deficit, even if it means restrictions on imports.

As for inflation, the IMF gets its money from countries like the U.S., money that usually comes off government printing presses.

Like most bureaucrats, those of the IMF are empire builders. Naturally, they want us to think that it's either more dough for them—or disaster.

Actually, when you examine the issue carefully, there's little good to be said for refilling their coffers and much that is bad.

Congress should kill this legislation, but it won't, because it never asked the right questions.

10 actions Bethlehem has taken to help improve future profitability.

1. We've streamlined our organization from top to bottom, eliminating layers of management and supervision.

2. We've reduced our salaried work forces by about 30% in two years.

3. We've reduced salaried compensation, ranging from about 30% for upper-level executives to about 8% for non-exempt salaried employees.

4. We've revised salaried employee benefits to contain escalation in costs, particularly health care costs.

5. We've reached a contract agreement with the United Steelworkers of America that represents a responsible move toward getting bargaining-unit employment costs under control to make us more competitive in the steel market.

6. We've shut down a number of facilities, and we're disposing of others, that were unprofitable or did not fit Bethlehem's long-range strategic plan, e.g., steel plants at Los Angeles and Seattle, ship repair yards at Baltimore, Boston, Hoboken and San Francisco. In addition, operations at our Lackawanna and Johnstown plants will be restructured by the end of this year.

7. We've completed the reorganization of most of our operating activities into business units with expanded authority and responsibility for their results. The business unit concept is a key element in our new style of managing and operating our businesses.

8. We've greatly extended our use of computers and office information systems to increase productivity and improve information flow...to assist in planning and controlling production and manufacturing processes.

9. We've continued to upgrade our steel operations, moving ahead on construction of a new bloom caster at our Steelton, Pa., plant and a new continuous heat-treating line at our Burns Harbor, Ind., plant.

10. We've pressed forward with quality of work life activity, encouraging greater employee participation in problem-solving and decision-making.

Some of these actions were painful, but necessary to make Bethlehem the tougher, more competitive company we are today.

Bethlehem

Bethlehem Steel Corporation
Bethlehem, PA 18016

Edited by Thomas O'Donnell

NEXT: A CAPITAL-SPENDING BOOM

The scramble to raise long-term cash and repay short-term debt

ODD, ISN'T IT? AS INTEREST RATES HAVE DROPPED rather sharply from their lofty levels of early 1982, corporate treasurers have scrambled even more madly to pay short-term debt with money raised by long-term borrowing or the sale of equity. There were compelling reasons for doing so in early 1982, when short- and long-term interest rates were near record-high levels, and interest-rate bears brooded over the prospect of even higher rates. Swapping debt for equity helped reduce interest costs, to the benefit of earnings, and strengthened many balance sheets. Even borrowing long term, at fixed rates, made sense when nothing but more inflation and even higher rates loomed on the economic horizon. Now the inflationary beast purrs like a pussycat. It's cheaper to borrow short term than it's been in years. Yet savvy financial types are treating short-term debt like a case of dandruff.

The "window" was supposed to close, but it didn't

LAST YEAR FINANCIAL VICE PRESIDENTS saw the decline in interest rates as, in their jargon, a window, or opening that would soon close. But things are different now. Dressing up the balance sheet has become an exercise in long-term preparation, and that's good news for the recovery. It portends a boom in capital spending. It puts corporate balance sheets in better shape for future financing and they will be further strengthened by the new equity, and from cash generated internally through bigger depreciation and lower short-term interest costs.

But the incipient capital-spending boom will look a little different from the conventional business-cycle booms of the past. The utilities, as Otto Eckstein of Data Resources observes, generally will not require increases in generating capacity for ten years or so. Such old-line manufacturing businesses as steel, automobiles, chemicals, rubber, glass and refining, too, will demonstrate relatively weak appetites for capital in the future. It's the service segment of the economy—including, of course, the government—that will demand a bigger share of capital than it has in past recoveries. This will mean more communications and data processing gear, less heavy machinery.

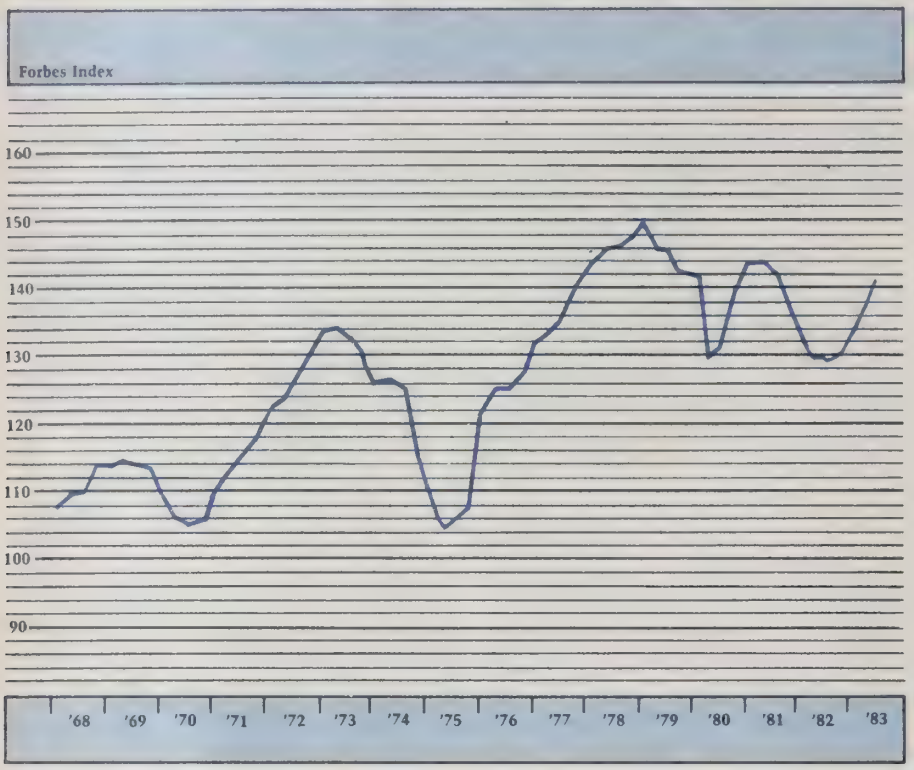
Inflation and government borrowing? Not to worry

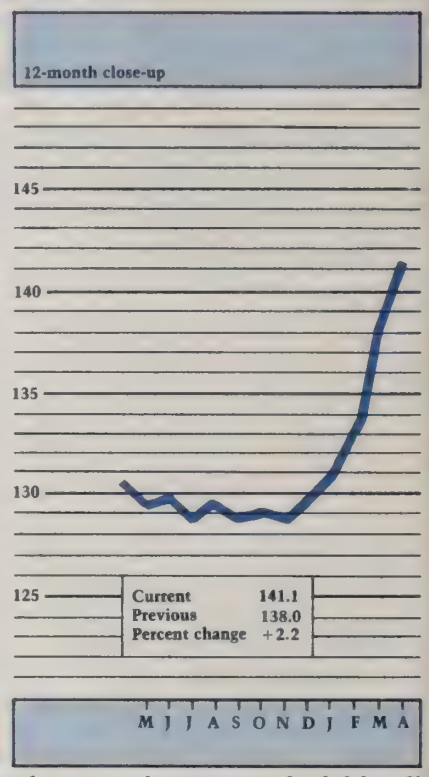
THE GOVERNMENT'S APPETITE WORRIES PEOPLE. In part that's because old habits of thought die hard. Deficits that look awesome in times of inflation and business stagnation should really be less than terrifying when a recovery has clearly begun. Which means that the deficit does not necessarily doom us to another burst of high interest rates.

But few of the corporate financial managers now borrowing long term or selling new shares will justify their decision with long-term logic. To them, stock prices look high, so the message is "sell equity." Too much bank debt and commercial paper threaten solvency when things are bad, so the word goes out: Replace it with long-term debt even if it raises our current interest costs. A treasurer puts it this way: "We're not counting on upturns to make our business viable."

Just the kind of thinking that makes businessmen shrink inventories, increase productivity and get in shape to expand. In short, the kind of thinking that has always laid the groundwork for a sustained recovery.

The Forbes Index





Rolling along. For the sixth time in a row, the Forbes Index is up, with most elements signaling a rosy economy.

Industrial production surged ahead last month with a solid 2.1% increase. Compare that with the 1.7% increase for the previous three months combined. Adding yet more justification to hopes for a sustained recovery, manufacturers' new orders picked up from a sad 3.5% decline in February to show an increase of that much in March.

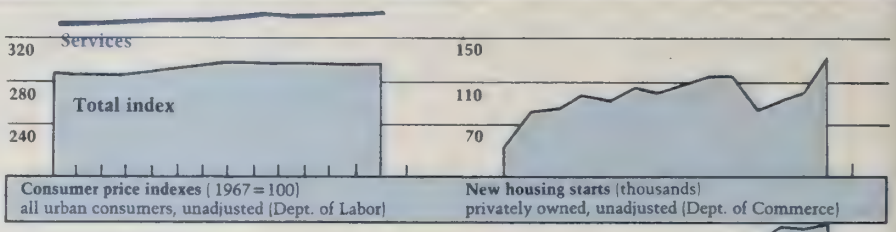
For a little more good news, it doesn't even look like all this new economic activity is contributing to overstocked warehouses, as inventories continue to be pared down—by 1.4% in March.

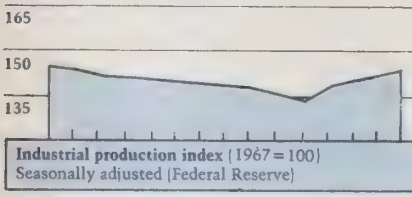
Consumers seem to be joining the party, with outstanding installment credit rising 0.8% in March against 0.2% the previous month. Retail store sales were up 1.6% in April, slightly less than March's 1.7% rise.

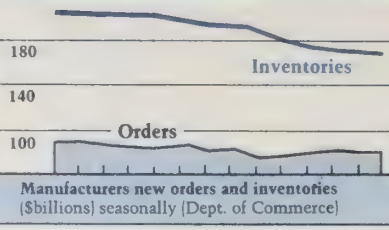
The Forbes Index Components

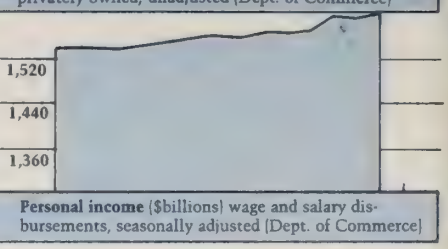
The FORBES Index is a measure of U.S. economic activity composed of eight equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, the level of new orders for durable goods compared with manufacturers' inventories, total retail sales, new housing starts, personal income, the change in the amount of consumer installment debt outstanding.

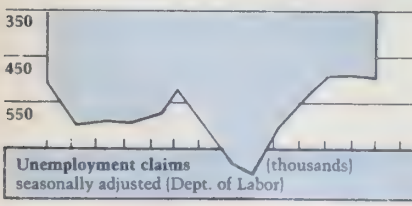
To measure these eight elements, FORBES monitors 11 series of U.S. government data. The last 14 months' data for each series are presented at right.

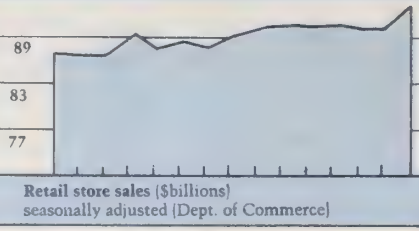


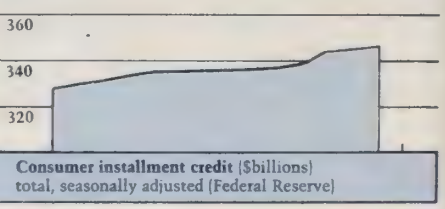












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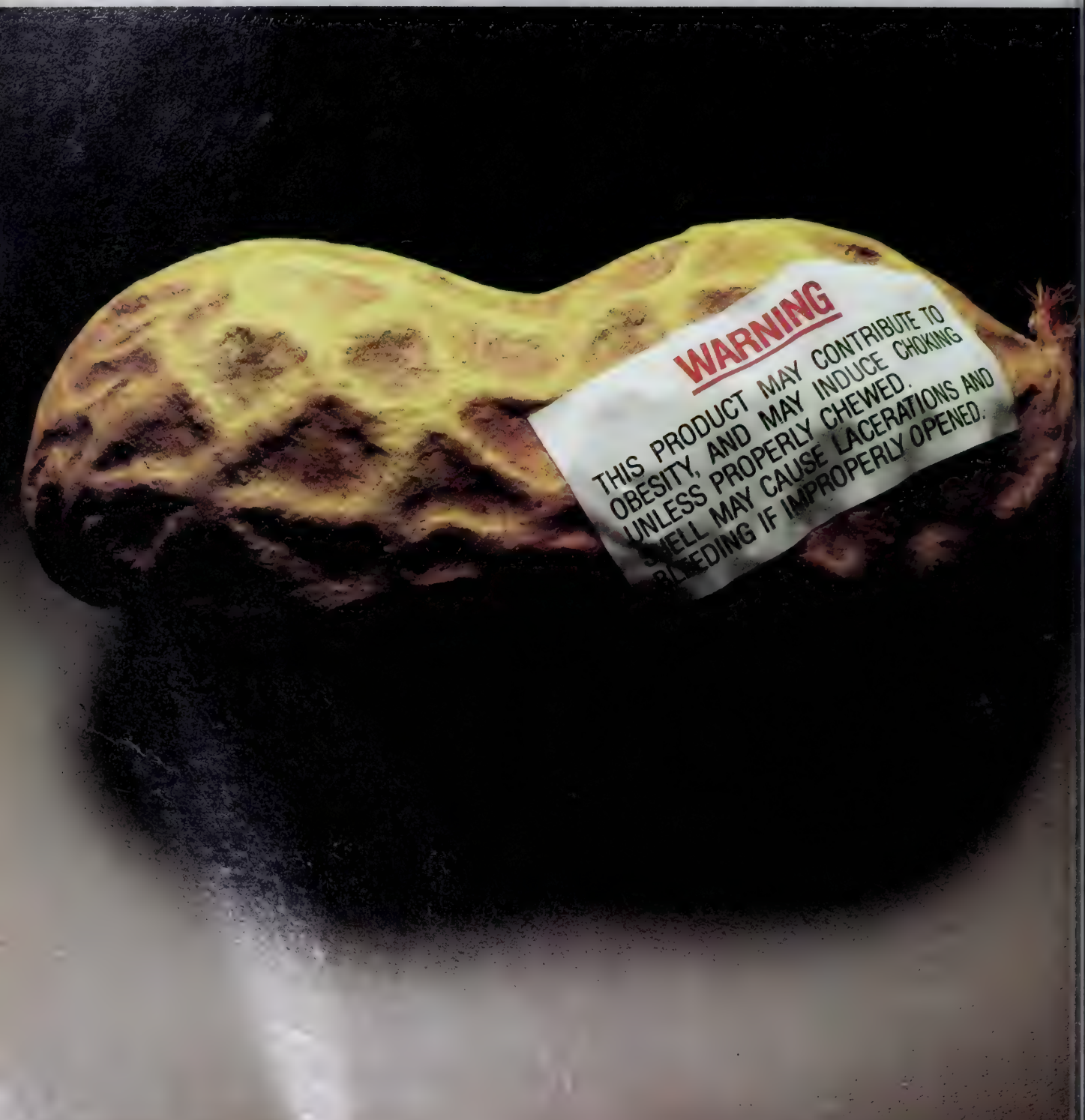

Warnings have come a long ay since someone had the good nse to put a ☠ on an iodine bottle.

Courts now require warning la- els on a whole range of products.

From paint thinner to pajamas.

There have also been rulings n exactly how large such labels ould be.

And where they should be.

And what they should say.

And it hasn't stopped at label- g, either.

Requirements relating to all spects of product safety have ushroomed in recent years.

And while these have been a enefit to consumers, they've often een a problem for manufacturers.

Because even a responsible orporation can face liability by nintentionally overlooking a new gulation or an obscure ruling.

That's why at INA, a CIGNA ompany, we're prepared to do ore than just insure our clients gainst product liability.

We do everything we can to eep them out of court.

To start with, we have a staff of roduct liability specialists who can xamine every step in the manufacturing and marketing process.

From design to advertising.

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If you'd like more information on this topic, please write to INA at 1600 Arch St., Dept. RA, Philadelphia, Pennsylvania 19101.

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Evidence suggests that unionized air traffic controllers deliberately put planes on collision courses to back up claims for early retirement.

A shocking charge

By Howard Banks

SOME U.S. AIR TRAFFIC controllers in the mid-1970s deliberately directed aircraft to fly illegally close together to further the controllers' claims to retire early with generous benefits.

This shocking allegation comes from a study into the side effects of concessions to employees in amendments made in September 1974 to the Federal Employees Compensation Act (FECA). The changes liberalized the rules covering government workers claiming to have been disabled on the job—especially when the disability was less than obvious, as in mental illness. The key change was that workers could choose their own doctors and not be put through a detailed examination by medics from their employer—for controllers, from the Federal Aviation Administration.

The seemingly modest concession opened a monster loophole. If controllers could find a doctor to attest to their suffering from mental stress, they could "punch out" on two-thirds of their pay (or three-quarters with dependents), tax-free—often more than their normal aftertax take-home pay. How to do it, since they needed to show that the "injury" to their mental health had happened at work? Put two aircraft closer together than the five miles horizontally or, above 29,000 feet, the 2,000 feet vertically allowed by aviation law (three miles and 1,000 feet around most airports),

An air traffic control room "somewhere in the U.S."
Now if I edge them a bit closer I can retire, tax-free.

and so cause what is called a system error, which is recorded. Then claim that the worry of it all meant that they could not sleep nights.

The loophole was turned into a gaping rift in the 1973-76 period, the years covered by the study. This happened because cutbacks had eliminated investigators at the Office of Workers Compensation Programs, who would normally look into such claims for possible fraud. The FAA simply passed the claims through without a second glance. This was the time when the then unionized controllers (under the now defunct Professional Air Traffic Controllers Organization) were successfully pushing the line that controllers were particularly stressed at work. Congress had already endorsed the idea, in 1972, when it passed the so-called second career program—government-paid retraining for controllers with five years' or more service who had "burned out."

The study, entitled "Information Costs and Incentives to Shirk," was carried out by John Umbeck of Purdue University and Michael Staten, now with University of Delaware. It was funded by the Carthage Foundation of Pittsburgh (donor: Richard Mellon Scaife), which has no interest in the aviation business, but put up money for an academic look into the moral hazards of governmental intervention in the market—in this instance, the labor market. Published in the *American Economic Review* in December of 1982, the study suggests that many of these system errors were, in fact, carefully controlled. It was not heavily laden jumbo jets, full of people, trying to land at a rain-soaked airport that were deliberately misdirected. The evidence suggests that it was two smaller aircraft at a quiet time of the day or night, so that the controller could try to ensure that deliberate error did not turn into accidental disaster. Cynical, the controllers might have been; sadistic they were not.

"We did not set out to get anybody," says Umbeck, who explains that the 1973-76 period provided an excellent case study into the side effect of a benevolent change in labor law that just happened to reduce the incentive to work. It was, in fact, only after the controllers' strike and their mass sacking in 1981 that the FAA learned of the study's findings.

Controllers provided an ideal sample, for several reasons. They are about the highest-paid government workers (averaging around $30,000 a year gross in 1974). Their pay gets close to a peak after five years' service and then levels out, reducing the incentive to stay with the job. The tax-free disability pension, moreover, was index-linked to protect it against inflation. Controllers are also among the most closely watched of any employees. A system error leads to instant suspension and an inquiry. In these circumstances, there could be no doubt that the "damage" to the controllers' mental health had occurred at work.

It also happened that there was a stable period in 1973-76. The numbers of controllers with service of under five years, five to ten years and longer stayed roughly constant. There were no major changes in the equipment used (radar or computer systems) and, thanks to the OPEC oil price rise, air travel in the U.S. did not change dramatically.

A total of 199 of all sorts of medical disqualifications among controllers took place in preliberalized 1973. This total grew to a peak of 546 in 1976 and then shrank to 479 in 1977 as some control was reimposed. More significant was the growth during this period in the proportion of those disqualified who could not otherwise get early retirement, say by reason of age. These increased from 143 in 1973 to 450 in 1976.

It was not jumbo jets trying to land at a rain-soaked airport that were deliberately misdirected. It was two smaller aircraft at a quiet time . . . to ensure that deliberate error did not turn into accidental disaster. Cynical the controllers might have been; sadistic they were not.

The study shows that disqualifications for most types of disease—such as heart trouble or stomach problems, typical results of stress on the job—went up by 20% to 50% after the rules were eased. Those punching out on account of lung troubles or backaches actually went down. But alleged neuropsychiatric problems went up by no less than 150%.

There was also a significant shift in the length of service of those involved in system errors. Preliberalized times showed that a higher proportion were caused by controllers with less than five years' service, the least experienced people. But after liberalization, in 1975 and particularly in 1976, there was a sharp jump in the numbers of system errors among controllers with five to ten years' service.

Further adding to the evidence of something nasty happening in the radar rooms is the fact that in 1973-76 there was a decline in the number of genuinely dangerous near-midair collisions. These are often reported by pilots scared at seeing how close was their own air miss. If some general reason existed to explain the increase in the number of system errors, then surely it would also have caused near misses to increase, too.

The disparity contradicts the two favorite cases put up against the Umbeck-Staten analysis. One is that increased errors were caused by pot-smoking controllers back from the Vietnam War. Why would being stoned have caused only extra errors and not air misses? The other, put forward by former PATCO leader Robert Poli, was that it was all the fault of poor equipment and computer failures. Investigation outside this study now suggests that dissident controllers were causing those computer outages, especially before the 1981 strike. They had found a way to save up data to be fed to the computer and then dump it in in a rush. Indigestion caused the computer to burp and trip out.

"Reprehensible," says an FAA insider calmly. "To make it more venal many controllers fixing to punch out had taken out loss-of-job insurance."

The FAA is working with Umbeck and Staten on a reexamination of the evidence. Umbeck accepts that some of the increased number of claims were genuine and allowed under the more humane rules. But there is little doubt, also, that most of the system errors were deliberate—human greed responding to an official invitation to cheat, as Umbeck puts it. "I would have done the same thing if I was them," he says. "Which is one reason we got started on this study."

This reexamination also implies that the outbreaks of controllers taking advantage of the loophole through mental disability claims occurred in pockets around the country. At each location there was a sympathetic doctor willing to sign them off. In effect, says Umbeck, the government paid the doctors "bribes," since part of the disability covered medical bills, such as a weekly session with a shrink at $100 an hour.

Be reassured. It is not happening now and for equally simple economic reasons. The OWCP has got its investigators back and the FAA no longer passes such cases through without a second glance. The disability payments come out of its budget, and in these squeezed times spare money is hard to come by in the government's service. ■

Unhappy the land where technology grows and common sense declines, and unhappy its army, too.

Learning the hard way

By Allan Dodds Frank

ANYBODY CONTEMPLATING a crash program for the space-bound, 1990s laser weapons recently envisioned and recommended by President Reagan should study the ten-year history of the Army's Copperhead artillery shell. There's a sadly obvious lesson in it, but a lesson that is apparently hard to learn.

Copperhead was conceived toward the end of the Vietnam War, when Army planners, impressed by the Air Force's television- and laser-guided "smart" bombs, were seeking a smart weapon of their own. Who, after all, wants to be left behind? The Army wanted a projectile that would overcome conventional artillery's inability to hit moving tanks. They proposed a laser-directed, cannon-fired shell that troops could pinpoint on targets by "painting" the targets with a concentrated beam of light. Homing in on enemy tanks, Copperhead would deliver, from ranges of 1.8 to 9.6 miles, an armor-piercing high-explosive charge combined with a lethal jet of molten copper. The Army, too, would enter the Space Age.

But humble, if costly, mistakes, not just technological difficulties, have made its development a nightmare. Put up for development bids in 1973 and awarded to Martin Marietta in 1975, Copperhead purchases were canceled in fiscal 1983 by the Army. Assured by Martin Marietta of improved quality and lower prices, the Army and Secretary of Defense Caspar Weinberger recently asked Congress to restore funding in 1984 for the $54,000-per-round shell. The total price tag, based on a current planned purchase of 30,000 shells: $1.6 billion.

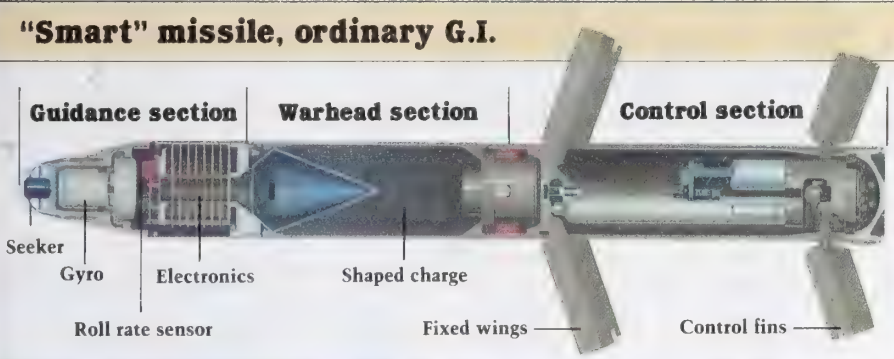
Because Copperhead meant firing sophisticated electronics from a cannon at 9,000 gs created by muzzle velocities of more than 1,000 miles per hour, the 54-inch, 137-pound shell was engineered to withstand tremendous longitudinal pressures in a 155mm gun. Less attention was paid to stresses along the horizontal axis, since the round would fit snugly in the howitzer's chamber. But subjected to bumpy truck ride tests, several long, narrow components shook loose while whipping horizontally. Thus loosened, wires, unless glued flat, came loose when shells were fired.

During tests of rounds filled with dummy explosives, the copper cone inside slipped back and severed wires. No one had calculated that the dummy round would behave differently without explosives. Keeping the copper in place took plenty of cash to fix, but engineers later discovered that, with real ammo, no problem existed. "We were solving a problem that didn't exist," recalls Colonel John Kronkaitis, the Army's Copperhead project manager.

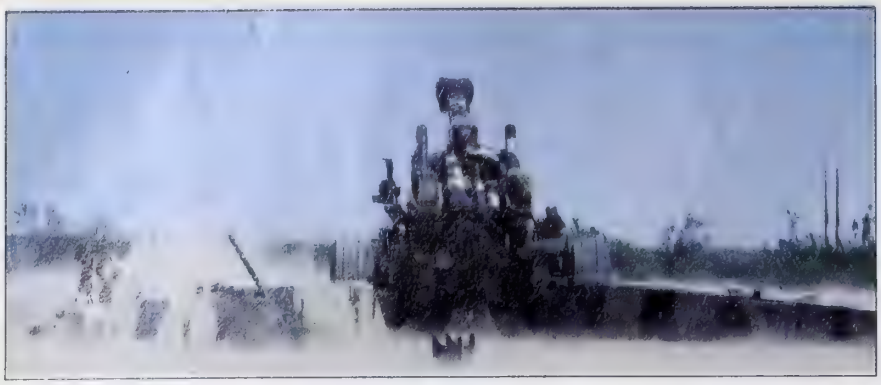
On the production line in Orlando, Fla. a workman greased two of three surfaces on a rotating part, but neglected the third. Result: Four Copperheads misfired at a cost of nearly $140,000, three days of production lost and 200 shells to rework.

The Army neglected some obvious questions, too. It did not clearly specify how well the laser was expected to perform in battlefield smoke or fog. "They just told us to do the best we could with smoke," says Martin Marietta's Copperhead project manager Howard Weaver, a former artillery officer. "Nobody in the Army really knew much about it." Result: In 1979 operational tests, Copperhead hit only 33% of smoke-obscured targets. False readings reflected off the haze. When the laser didn't get true target

"Smart" missile, ordinary G.I.



Cross section of the Copperhead laser-guided artillery shell: Laser seeker in shell's nose homes in on laser beam shone by foot soldier (right) on enemy tank with Ground Laser Locator Designator (GLLD). The shell is fired from a standard, 155mm gun, the wings popping into position ten seconds after firing.



Test-firing Copperheads at sunny White Sands, N.M.
"They told us to do the best we could with smoke."

readings, Copperhead searched aimlessly for targets, then fell without effect or control.

Since then, the laser designator and infrared night sight have been improved, says Army project manager Kronkaitis. The weapon is now capable of accurate fire in smoke and fog 75% of the time. Heavy snow or rain density will still degrade performance, although the shell has been improved so that it can be fired in cloud ceilings of 1,000 feet or less, which means in more than 90% of all weather in Europe.

The Army originally stipulated cloud cover only down to 2,000 feet, and the improvement was made partly in response to evaluation by a liberal critic, Dina Rasor of the Stewart Mott-funded Project on Military Procurement. Using Army data, Rasor pointed out that cloud cover in West Germany is below 2,000 feet nearly 20% of the time. She also argued that in a surprise attack, the four minutes required to call in a Copperhead strike would allow enemy tanks moving at 20 miles per hour to travel more than 1.3 miles, enough distance to threaten forward observers in many situations.

What happens to forward observers is important because, for all Copperhead's wizardry, ordinary foot soldiers are crucial to its operation. Copperhead's mission is, in the Army's phrase, "to attrite" Russian tanks before they reach the U.S.' forward battle line. Thus two soldiers must go forward to spot faraway Russians. Their laser apparatus weighs 56 pounds and takes five minutes to erect. Then they must radio back to headquarters while shining a laser beam for as long as 13 seconds on the oncoming Russian tank to allow Copperhead to strike. If communications are clear, the process takes two minutes. The enemy targets, meanwhile, must remain visible.

Might not Russian tanks, equipped with laser detection devices, train their machine guns on opposing hillsides? Will the GI observers remember they are out of machine gun range, or will they seek to get out of range, leaving behind the $350,000 laser designator? Army Training & Doctrine Command officers pooh-pooh any suggestions that GIs will bug out. They discount Russian laser alarm and say Soviet tank crews would g crazy every time the alarm went of knowing that 13 seconds later Copperhead could be on the way. Th Army calls it "the pucker factor."

Still not entirely comfortable wit the manned lasers, the Army is deve oping the Remotely Piloted Vehicle, 6-foot-long, 220-pound drone aircraf with a quiet, rear-mounted propelle that is supposed to fly over enem lines at 100 miles per hour or less fo three hours. The little plane, launche from a truck, is supposed to send bac TV images and shine the laser on en emy targets. But the little pilotles planes aren't in production yet and, o course, are yet to be proved.

Whether Copperhead will work de pends on what, and whom, you be lieve about the $1.6 billion program In military affairs as in social spend ing, throwing money at a problem doesn't usually produce results. ■

Nothing is as persuasive as an illusion whose time has come. Interstate banking, for example.

Groucho Marx said it first

By Michael Cieply

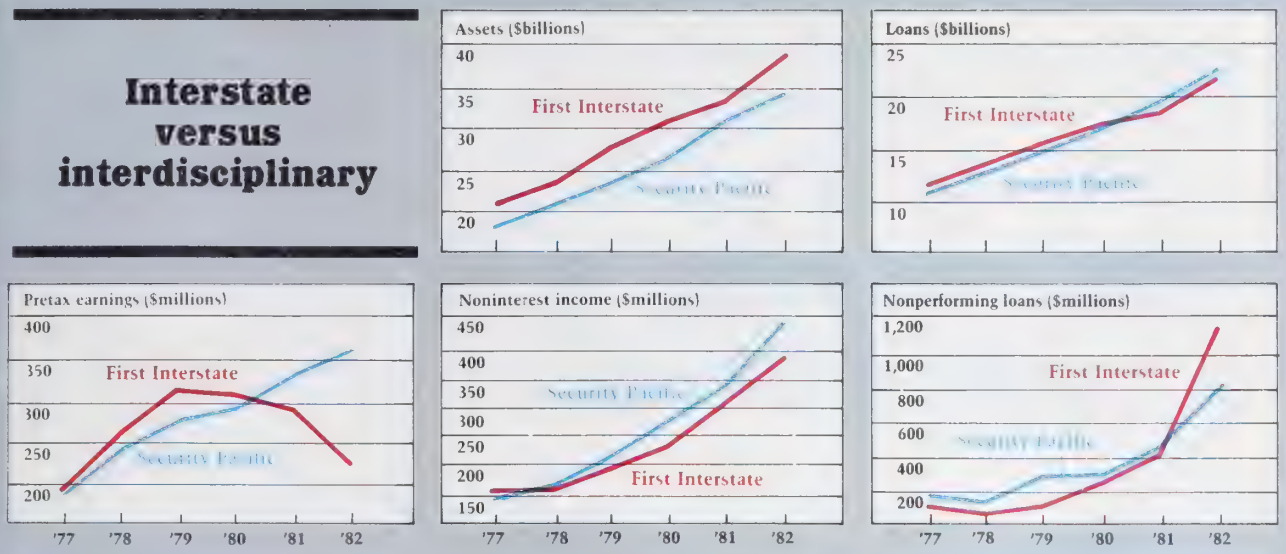
FIFTEEN MONTHS AGO Joseph Pinola, chairman of $41 billion (1982 assets) First Interstate Bancorp, launched a seemingly ingenious attempt to forge a coast-to-coast empire of franchised banks.

Pinola was responding to his strategic planners, who had predicted that deregulation would eliminate 7,000 banks while reducing the retail banking industry to as few as ten major survivors, half from the nonbanking sector—Merrill Lynch, Sears, etc.

Pinola took a certain relish in that vision. He reasoned that frightened local bankers, faced with interstate competition, would welcome help from his 21-bank holding company. After all, founder A.P. Giannini had positioned First Interstate in 11 western states before federal law stopped interstate expansion. Wasn't it, therefore, the first interstate bank? Already the U.S.' eighth-largest bank, it would sell smaller banks the use of its name and access to a $100 million comput-

First Interstate's Pinola
Invitations declined.

Interstate versus interdisciplinary



Is a headlong rush into interstate banking the only response to deregulation available these days for a big bank in retail-oriented California? In a word, no. Security Pacific Corp., $37 billion assets at the end of 1982, has diversified in recent years into such high-margin lines as equipment leasing and commercial finance. The results are clear from these charts, which show Security besting First Interstate in crucial categories.

erized network and get in return substantial fees plus a nationwide system of possibly 5,000 outlets.

But the results are meager: Three banks—one tiny unit bank in Colorado and two small branch systems in Hawaii and Alaska—have signed up with Pinola. Two more are promised soon. Why the lack of enthusiasm? Pinola blames it on the inertia of American managers. But it seems more likely that Pinola, 58, has misjudged both the shape of the future and the savvy of his small-time counterparts.

Pinola's planners saw the greatest vulnerability among banks with $100 million to $500 million in deposits. But Richard Evers, president of a member bank in Citizens Bancorp., a $560 million Wisconsin holding company, isn't too worried. "We're going to get involved in new lines of business," says Evers. "And we're probably going to do it better than outfits like First Interstate, who claim they can do it all for you."

The way Evers sees it, FIB is offering to sell his Citizens North Shore bank, with deep roots in its community and a sterling record, a chunk of its own territory—while charging a fee that could run the equivalent of .07% return on assets. As to Pinola's offer of such big-time services as discount brokerage, Evers scoffs: "I've been a discount broker since the day it became possible. I was inundated with people asking me to join their system." The same goes for ATMs. By year's end FIB could link Evers to a nationwide, instant cash system. But the Wisconsin-wide network Evers joined seven years ago already plans to go national. The reality: With numerous suppliers, such as Systematics Inc. and First Financial Management Corp., offering bank services today, smart bankers can barter for all the service they're likely to need.

The smaller banks, too, are setting the terms of their own consolidation. Since 1981 roughly 900 banks have filed acquisition or merger applications. In fact, a web of regional alliances is far more likely than dominance by national chains, says Forbes Olberg, whose Banks of Iowa has arranged to join forces with $17 billion (1982 assets) First Bank System of Minneapolis. "To remain on the cutting edge, you have to pick your partners," says Olberg. Likewise, William Bowen of Arkansas' Commercial National Bank speaks of his pending merger with First National in Little Rock: "That will push us to $900 million-total-asset size, and give us strength in multibank-holding-company development."

Such spirited bankers would be a welcome addition to Pinola's franchise system. Yet Bowen rejected FIB's pitch. "It reminded me of Groucho Marx' old line," says Bowen: "I'm not sure I'd want to join a club that would have me as a member."

Meanwhile, First Interstate's earnings fell 7.3% last year, to $228 million, while return on assets dipped to 0.6%, far less than the 0.98% median, the profitability of many of the small banks Pinola set out to franchise. FIB's primary problem was in the California subsidiary where earnings fell 38% because of nonperforming construction loans.

But beyond that, Pinola is still struggling to bring efficiency to the agglomeration of banks spun off by Transamerica Corp. in 1958. Indeed, the lesson for those with interstate ambitions: It is no simple matter to amalgamate banks.

Until last year, loan officers from all 21 First Interstate banks got in each other's way by calling on the same corporate prospects, while FIB got only second-tier fees on syndication loans because the banks didn't participate as one lender. Pinola, a Navy veteran who left high school to serve in the Pacific during World War II, has now assigned individual subsidiaries lead-bank status for various specialties—Oregon for forest products, California for housing, etc.—while arguing for first-tier fees.

Equally troublesome, minority stockholders in the individual banks limited Pinola's ability to rationalize FIB's capital. Investment is concentrated in pockets like Nevada and New Mexico, while the California bank has leveraged itself. Only recently, Pinola bought in those minority positions.

And, as to getting uniform performance from individual management fiefdoms, Pinola is older but wiser. "The only time the place will run on all 21 cylinders is the year when they know I'm about to retire," he says. The legendary King Arthur, facing a somewhat analogous problem, devised the round table. But how do you run a bank from a round table? ■

Looking for another energy lender in trouble? Try the U.S. Maritime Administration.

Bureaucracy's visible hand

By Toni Mack

THERE IS MUCH WEEPING and gnashing of teeth these days among the doctors and lawyers who invested in oil and gas tax shelters. Guess who is wailing alongside: Uncle Sam, whose Maritime Administration has $1 billion at stake in loan guarantees for offshore drilling rigs and $517 million more for drill service boats.

Marad, reluctant to admit defeat and foreclose, has already paid $1.4 million in interest on two rigs operated by Houtech Ltd. I, a partnership put together by Rotan Mosle, the Houston brokerage house recently bought by Paine Webber. Marad has also paid another $3.4 million on service boats—"to protect the government's collateral interest in the vessels," as the press releases gingerly put it.

How did the government get into this fix? Marad first took rigs and boats under its wing with the Merchant Marine Act of 1970. Later, when oil exploration took off in the mid-Seventies, so did Marad's loan guarantees. Not without objection. John P. Laborde, chairman of boat operator Tidewater Inc., has been writing letters of complaint to Marad for two years. He explains: "The combination of limited partnerships and Marad financing brought people into the offshore business who normally would never have dreamed of it. The representations [to tax-shelter investors] were always that 'this will always be a good business, and after you milk it of all these tax goodies up front, the residual value of the vessel will be at least what you paid for it, and you'll probably make a profit on that.' It was a grand-sounding story."

Grand, except that Marad's timing was off. Most of the loan guarantees for tax-shelter vessels were granted in the boom times of the late 1970s and early 1980s. Though the Reagan Administration cut off most new guarantees, three rigs got backing as late as mid-1982, when the market had already soured. Marad has let the rigs' operator defer $9 million in principal payments. Of 29 Marad-backed tax-shelter rigs, at least 12 are idle or working at drastically reduced rates. As vessels come off long-term contracts into a glutted market, the situation will only worsen.

Marad has little choice but to try to keep its rigs and boats afloat. In rigs, for instance, it controls 11% of the world's fleet. If Marad foreclosed, those rigs would go up for auction and then bob back onto the market at probably 25% to 35% of their original cost. That would further depress rig rental rates and force the government into hundreds of millions in payments to bondholders. (Marad's $345 million kitty covers its total $8 billion in guarantees.) Marad is said to be triggering its first foreclosure, but it must step softly. Any hint of a general foreclosure policy, says Beaumont, Tex. maritime lawyer J. Hoke Peacock, "would crash the market, and I think they know it.

"They're like any bureaucrat," adds Peacock. "Their inclination is not to admit they were wrong, and foreclosing is an admission you were wrong."

Of course, Marad can't be wholly blamed for the bust in the offshore market. Once the tax-shelter hawkers got in on the act, oversupply was inevitable, as any observer of the cattle and railcar industries will tell you. The mystery is why Marad, whose objective is a strong merchant marine for defense purposes, got into the act, too. What navy ever went down to the sea in jack-up drilling rigs? ■

The commercial loan market may look like an amusement park to thrifts. But too much cotton candy can make you sick.

S&Ls in the candy store

By Richard Greene

IF IT ISN'T one thing, it's another. Just last year savings and loan institutions were crying to Congress that they couldn't function without federal relief. So Congress broadened their franchise and allowed them to sell money market deposit accounts. This has helped bring in close to $30 billion in additional cash so far this year, and now the S&Ls have a new problem: What are they going to do with all that money?

One answer: Make commercial loans. Under regulations passed by Congress late last year, S&Ls are now allowed to lend between 10% and 40% of their assets to commercial borrowers, depending on the type of collateral. This is an attractive opportunity for the industry's giants, which can hire expensive commercial loan departments. But what on earth do little S&Ls know about making big commercial loans?

Very little. That's why the latest trend among small and middle-size

S&Ls is to form commercial loan syndicates. These confederations can put together enough capital to make large commercial loans and then hire enough outside talent to find borrowers and package loans.

Savers Capital, the first major syndicate, consists of 30 institutions nationwide led by Western Savings & Loan of Phoenix. It started operations two months ago and should soon have placed about $600 million with large corporate accounts, according to Edwin Stanley, an Oregon consultant and cofounder of the confederation. His group aims to lend $1.5 billion by year's end. There are at least two more major syndicates already in existence, and any number of other S&Ls are considering similar moves.

Corporate loans certainly sound like a perfect market for the industry. After all, most business borrowers are looking for long-term variable rate money, just the sort of deals S&Ls are familiar with. And there's no doubt that clever syndicates can use these loans as a profitable addition to the fixed interest mortgage market that spelled disaster in recent years.

But S&Ls that plunge in without hiring the proper expertise could be badly burnt. "The major potential problem is greed and avarice," says Robert Shafton, a real estate specialist

with the law firm Stroock & Stroock & Lavan. "If the junk loans fall to these little guys, and they say, 'Hey, we can get a good spread on this stuff, and we'll gamble,' then those guys are going to get murdered."

Michael D. Foxman, who founded $450 million Sunrise Savings & Loan in West Palm Beach, Fla. and now practices law in Philadelphia, sees another potential problem. "There's a parallel here to the real estate investment trusts," he says. "They had a lot of cash to invest quickly because they had to start paying dividends right away. Those which didn't have the right expertise got murdered."

There isn't the same pressure on S&Ls to invest. But they clearly want to start upgrading their portfolios immediately. What's more, the up-front fees available in many commercial loan deals can be sorely tempting.

Even for those syndicates that hire good talent and eschew greed, there are risks. Say ABC S&L of ABCville wants to involve its syndicate in a major corporate loan to ABCville's biggest company. Suppose the syndicate refuses because the credit is risky. That can cause tension in a group made up of equals. "When you have banks of equal size, everyone tries to show everyone else how smart he is," says Anthony Frank, chairman of First Nationwide Savings of San Francisco, 82%-owned by National Steel Corp.

Frank is skeptical about the syndicates, so he's planning an alternative. His institution, with $850 million in revenues last year, will provide a number of services for smaller S&Ls for a fee. Among them: management consulting, professionally produced advertisements and access to a commercial leasing department.

Obviously, the thrift industry is changing. And there's little doubt that since institutions need to find markets beyond traditional home mortgages, commercial loans make perfect sense. But for the newly liberated S&Ls, this may turn out to be Frontierland. Beware of Indians. ■

Streetwalker

The truth about bears

Bears? Bears? Are there any left? "If there are," says Robert Wilson, "they can't have much left but their telephones." Wilson, one of the smartest investors in the country, says: "I haven't been bearish since 1978."

Okay, FORBES said to him, but you do hedge your long positions with shorts. That's the way you usually operate. He nodded. What are some of his shorts? He wouldn't name names, but he would cite industries he thinks contain short-sale candidates. Wilson: "Oil companies on the edge of bankruptcy. If demand increases, the supply will increase, so there's no way for prices to go up and rescue them."

Pacemakers: "They've been on my 'watch' list ever since the federal government announced it was going to do more regulating of them. Besides, there's not much unit growth and a lot of these guys may go the way of the kidney dialysis industry."

Home video and arcade games: Too much competition. "The industry won't disappear. But the whole spectrum—from Coleco to Pizza Time—is just too crowded."

Generic drugs: Ditto. "It's become the dog-eat-dog business it should."

Cellular radio: It could disappoint a lot of investors. "The enormous start-up expenses mean it won't be profitable as quickly as the market seems to believe."

"Obsolescent technology." Wilson means technology companies that may be falling behind or facing tougher competition. He mentions: Data General, Datapoint, NBI, Storage Technology, Floating Point.

One more question, Bob: How have you done on the short side recently? A moment's silence and then: "I've lost a load. I don't even want to look." No sympathy needed, however. He's made a lot more on his longs than he has lost on his shorts.—**Thomas Jaffe**

CBS: Buy on bad news?

Unexpected bad news invariably leads to sharp drops in a stock's price. In doing so, it sometimes creates a buying opportunity in cases where the effect of the news is out of all proportion to the import of the news. Does that make CBS stock a buy right now? The bad news was a sudden company announcement showing it had overestimated the strength of advertising revenues. It now expects a couple of disappointing quarters this year. The stock responded by falling 10% from its 52-week high of 77⅝. Analysts hadn't expected the bad news; when CBS brass met with the stock pickers recently there hadn't been a hint of trouble. Given, however, that CBS' basic position isn't in question, does the sharp drop create a buying opportunity here? Says analyst Joseph Fuchs of Kidder, Peabody, "Surprises aren't unusual at CBS." He points out that even with the decline CBS still sells at 10 times this year's earnings. But Fuchs recommends that investors watch rival ABC, with the same P/E, and buy it on any serious weakness. Fuchs thinks ABC's earnings are less uncertain, and it's a purer broadcasting play.—**T.J.**

Chips off the old blocks

Like father, like son? The late David J. Greene was one of the shrewdest men on Wall Street. The tough and wily Thomas Mellon Evans, still very much extant but not the bull in the

china shop he once was, has few rivals in structuring a deal or in taking over and reshaping a sluggish company. Now meet their sons. Alan Greene, 54, now the managing partner of David J. Greene & Co. Thomas' son, Edward Evans, 41, is currently chairman and a large stockholder of the publishing firm, Macmillan, Inc. But Alan Greene also has his eye on Macmillan. Whereas Evans has 3.6% of the stock, Greene and his clients have 11%. Showing himself to be as tough as his father, Evans has taken an ax to Macmillan's tangled operations and now has the company relatively healthy. So far, both have profited handsomely. Greene and clients, for instance, bought in for around $14. With the stock recently at $33, that's a $20 million paper profit. Where the two fall out, rumor has it, is that Evans likes being a CEO and wants to keep running Macmillan. Greene wants to find a buyer for his block, and it is conceivable that he could put it into the hands of a would-be acquisitor. If the two boys are anything like their dads, there should be some interesting developments.—**T.J.**

U.S. companies' technical help for Komatsu beginning in the 1960s has come back to haunt them and Caterpillar Tractor.

Bargained birthright?

By Lisa Gross

TWENTY YEARS AGO Komatsu Ltd. was a puny, $168 million (sales) manufacturer of a limited line of earthmoving equipment. It was threatened by Caterpillar Tractor's entry into the Japanese market, in joint venture with giant Mitsubishi. Lacking a full line and the technical knowhow to produce machines of Cat's sophistication and quality, Komatsu simply could not compete.

But taking full advantage of the Japanese government's policies demanding that foreigners give help to Japanese companies in return for access to Japan's market, Komatsu gained the necessary expertise and developed a full product line through joint ventures and licensing agreements with U.S. manufacturers, including Bucyrus-Erie, International Harvester and Cummins Engine.

Nobuo Murai, president of Komatsu America
Dogging Cat's heels right down to the color of its bulldozers.

Today Komatsu holds 13% of the world construction equipment market, to Caterpillar's 36%, while its joint venture partners are also-rans. Komatsu, at $3.4 billion sales and $138 million earnings, has the size to challenge $6.5 billion (sales) Cat—which lost $180 million in 1982—while Cummins is struggling and Harvester has left the business, clinging to its corporate life. Playing with two great advantages, an undervalued yen and labor costs 55% those of Caterpillar, Komatsu is wooing dealers in an allout assault on the U.S. market.

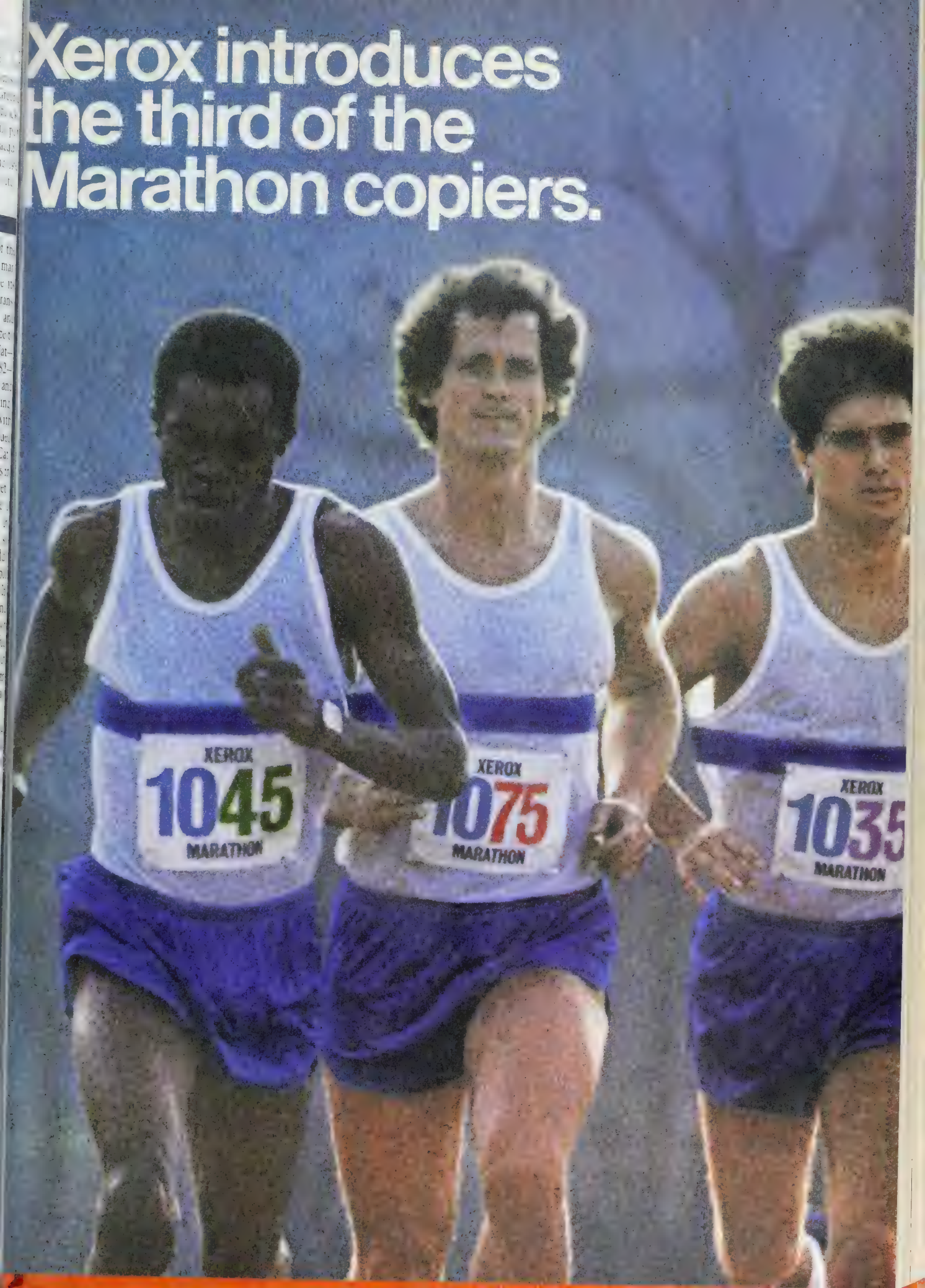
Did the U.S. companies create a Frankenstein? What did they buy in the Japanese market that was half so dear as the technical ability they sold?

The Americans drove reasonable bargains from their point of view. In exchange for help from Bucyrus and Harvester, Komatsu had to agree not to sell excavators and loaders in the American market for 17 years. But it gained the essential knowhow from manufacturing the products, such as Bucyrus' excavators, in Japan.

Three years ago, perhaps growing nervous that Komatsu had expanded to five times its own size, Bucyrus began to ask for royalties on two new Komatsu products built using Bucyrus technology. "They thought they were entitled to sell machines that used technology we had given them in confidence," says Vice President R.G. Olander. "Bucyrus didn't agree." So Komatsu bought its way out of the contract in May 1981, paying Bucyrus $13.6 million to get the data it wanted and another $6 million for royalties on the balance of the contract.

Aside from those "divorce" payments, what did Bucyrus gain in sales and earnings in the 17 years of joint venture with Komatsu? The Milwaukee-based company declines to say. But clearly Komatsu gained the knowledge it bargained for. Since breaking the agreement, Komatsu has developed a line of excavators with advanced hydraulic systems and fuel-efficient engines. They are being introduced in the U.S., where they will compete against Bucyrus machines.

Xerox introduces the third of the Marathon copiers.



The new Xerox 1045.

A Marathon with many competitors but no competition.

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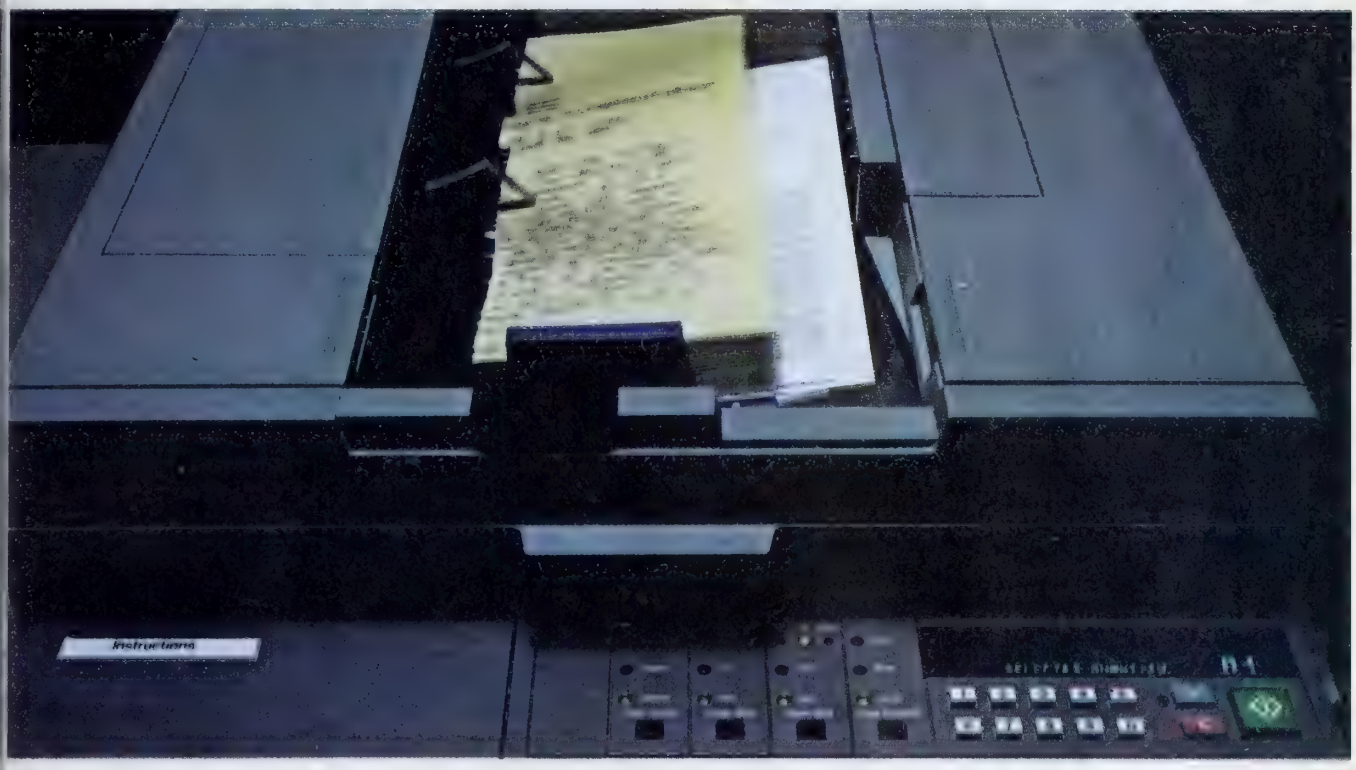

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Komatsu and Harvester built four-wheel-drive loaders together until last year, when financially strapped Harvester sold its construction equipment business to Dresser Industries for $83 million to raise cash. Komatsu was able to buy Harvester's half of the loader venture for $52 million. Today Komatsu makes 20 models of loaders that it might not have if it had not gone to Harvester years ago.

Cummins Engine's case is different. It was looking to sell its engines to Japanese manufacturers, including Komatsu, and concluded a licensing and supply relationship that survives. The two also have a research agreement, begun in the early 1970s, to share diesel engine improvements. Why is Cummins willing to let Komatsu in on its plans? "It saves both of us the cost of doing the research twice," says Cummins Chairman Henry Schacht. Cummins is not skimping on R&D: It spends 5% of its $1.6 billion sales on research. Komatsu now spends about 4% of its larger volume, but for years it has spent only about 2% on R&D—less than Caterpillar. It didn't have to do all its own research, of course, with eager U.S. partners to supply it.

What happens to Cummins Engine if Komatsu takes the technology and runs? "If that happens, we shouldn't be surprised," says Schacht. "After all, we had the opportunity not to license." To be sure, Komatsu might well have grown to international prominence without help from the U.S. companies. It has worked hard to achieve its success. Also, there were no protests back in the 1960s against Japan's mercantilist policy of forcing joint ventures. But shouldn't the U.S. companies have foreseen that they were creating a competitor in helping Komatsu?

The truth is, the Japanese company had a larger, longer-term vision than its U.S. partners. You pay for lack of vision in business. Komatsu now is trying to separate also-ran equipment companies from their dealers. It has 51 dealers selling Komatsu equipment but also carrying machines made by Bucyrus and other manufacturers. Komatsu would like to see those dealers handle its equipment exclusively, just as Caterpillar dealers handle only Cat equipment. With a full line and interchangeable parts, it argues, the Komatsu-only dealer can save on inventory costs. Komatsu America Corp. President Nobuo Murai estimates it will take five to eight years to build its dealer network, helped along by what he sees as a doubling of Komatsu's current 6.7% share of the U.S. market.

Have U.S. companies learned anything from the rise of this Japanese company? Maybe they have. These days, U.S. companies are approaching Komatsu, asking to sell some of its diversified lines of products and learn its technology. Westinghouse Electric Corp., for example, is currently negotiating to sell Komatsu-made industrial arc-welding robots in the U.S. Under the agreement Komatsu will not sell the robots in the U.S. or Canada. Eventually Westinghouse hopes to build the Komatsu-designed robots in the U.S. In the meantime, Komatsu has hired Westinghouse to research the feasibility of ion implantation as an alternative to traditional methods of hardening metal. Will the venture one day come to haunt Westinghouse? Or Komatsu? ■

No planned obsolescence?

Komatsu presents a dilemma to dealer C.W. Aring Jr.

Now that Komatsu can supply its U.S. dealers with a full line of construction equipment, distributors like C.W. Aring Jr. of Butler, Wis. face a choice. Like all Komatsu dealers, he carries other lines, including FMC and Clark. Komatsu would like Aring to drop them. But it will be a hard sell.

In the last three years, the bottom has fallen out of new-equipment sales. Its $4 million parts and service business has been the salvation of Aring Equipment Co., as sales fell from $22 million in 1980 to $11 million last year. Aring's non-Komatsu equipment accounts for 90% of parts and service.

One reason: There are more non-Komatsu machines in the field. Also, the Japanese have shipped quality to enter the market. Although Aring has sold 150 Komatsu bulldozers and crawler loaders since he became a Komatsu distributor in 1977, those machines haven't required many repairs.

So couldn't Aring have it both ways: Drop the other lines but continue to service their machines? Not in the real world. The forsaken manufacturers, explains Aring, "could make life very difficult for you. If you wanted parts, you could wait forever."

There is also the aroused competition of Caterpillar, which is trumping Komatsu's 10% price edge. Aring figures the Cat dealer down the street is currently getting manufacturer discounts of 40% or more, and passing 75% of that on to the customers. "It's a buyer's market," says the 59-year-old Aring. "Contractors are willing to take a look at a Komatsu machine on a dollar-for-dollar basis, but they're not going to pay a premium."

But don't discount patience and determination. The company that learned and improved on U.S. technology will undoubtedly learn U.S. marketing techniques. Says Nobuo Murai, president of San Francisco-based Komatsu America Corp.: "I've been telling our distributors we'll have 15% of the market in five to eight years."—**L.G.**

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Some of the changes at Westinghouse have already shown up on the bottom line. A lot more are in the offing.

Can you be sure, if it's Westinghouse?

By Thomas O'Donnell

WHEN WESTINGHOUSE Electric Corp. recently announced a major reorganization, investors yawned. The company's stock fell two points over the next three days. No wonder. Westinghouse has oft disappointed. Why should this time be any different?

This time, however, the skeptics may be wrong. Westinghouse is moving with a speed and confidence that it has not shown in decades. And, for a change, it has friends on Wall Street: The stock has handily outperformed the market since last summer and currently is close to the alltime high it set in the early Seventies.

Earnings in 1983 will be so-so, up only about 5% from 1982 levels, which were only marginally above 1981's. Still, everything is relative. In the 1974 recession, Westinghouse was hard hit, and earnings fell sharply; this time they did not. Says Tony Hitschler, president of Philadelphia's Provident Capital Management Corp.: "The old Westinghouse would have taken a very bad beating in a recession like that."

However, what really impress the analysts are more fundamental things. Robert Kirby will end a nine-year reign as Westinghouse's chief executive when he retires in December. An intense but not humorless man, he has in his near-decade at the company's head fashioned a strategy that moves Westinghouse's emphasis away from heavy industry and into cable television and video programming, electronic defense countermeasures, satellite transmission and robotics. It's not easy to work changes on a solid, stodgy old company, but Kirby seems to have done so. Says the tall, thin, chain-smoking Kirby: "Our older markets are mature, and the new ones offer growth."

Of course. But the quest for growth has brought disaster to Westinghouse

Douglas Danforth, chairman-elect at Westinghouse
Taking time out to look after llamas on his Pennsylvania farm.

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Brake-generated heat buildup is dissipated into airstream 2 via heavily slotted alloy wheels.

Inlet at windshield base 3 diverts measured airflow to help cool sensitive electronic components under the hood.

Channels integrated with windshield posts 4 intercept rainwater dispersed by wipers, conduct it upward onto roof area 5 and away from side windows.

Outside mirror shell 6 shaped to deflect swirling water, slush from mirror surface.

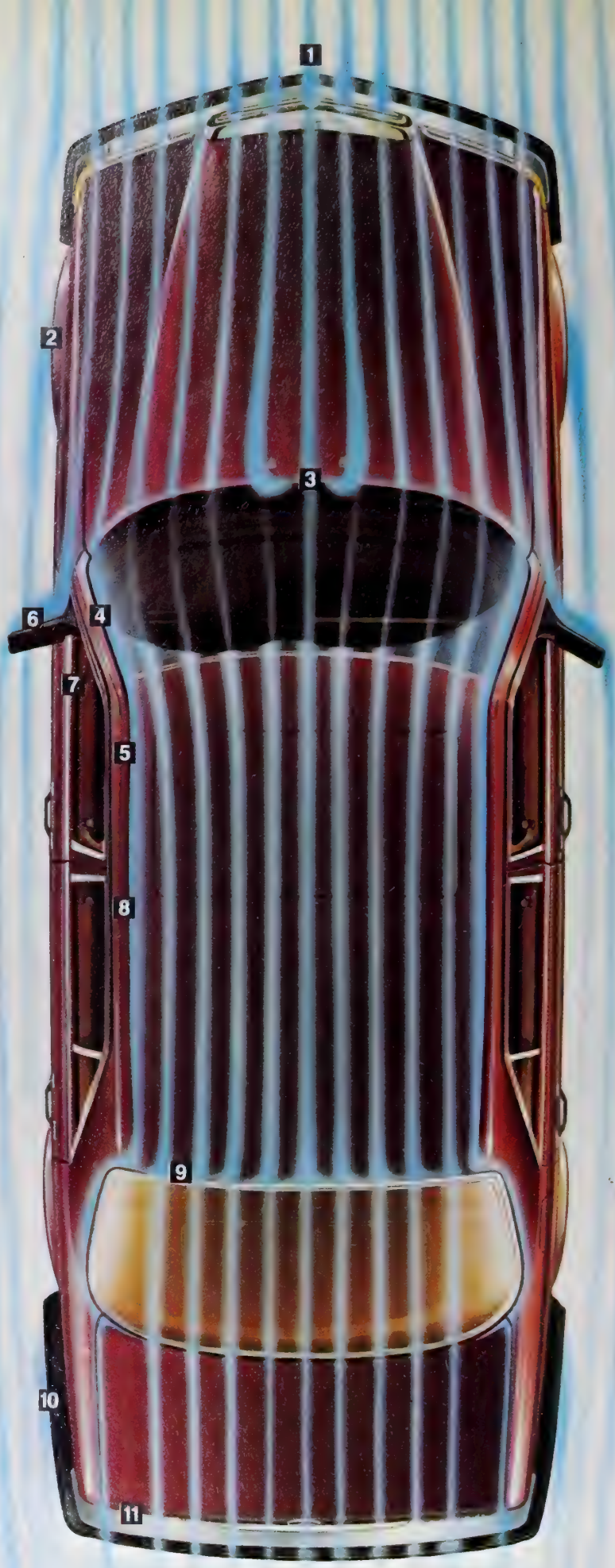
Fine aerodynamic detailing of cabin exterior 7 keeps wind turbulence and noise at minimum.

Channels set into roof 8 help guide rainwater rearward and away from side window area.

Grooves trap streaming rain and duct it around rear window frame 9 to exit at rear of car.

Ventilation gills 10, placed in a controlled low-pressure area at rear quarter panel, efficiently draw stale air from cabin. Air in cabin is completely exchanged every 20 seconds.

"Washboard" ribbing of taillights 11 helps keep their lenses clean, even in foul-weather driving.



The difference between aerodynamics and Mercedes-Benz aerodynamics.

The Mercedes-Benz sedan sweeps through the stormy night along a rainswept highway. Inside the car, stereo music muffles the rhythmic slap-slap-slap of the wipers and everything is normal.

But outside the car, everything is not normal.

The rain is heavy, but the side windows remain oddly unstreaked.

The surface of the driver's outside mirror is almost free of swirling water.

Sheets of rain should be streaming down and over the rear window glass, but they aren't.

Enough grime is kicked up as the car whisks along to cake the taillights. But the taillights still glow ruby red.

Something strange and wonderful–and aerodynamic–is happening to this Mercedes-Benz.

0.36 not enough

It is happening by design.

There is, of course, no more aerodynamically pure four-door sedan sold in America than the Mercedes-Benz 300SD Sedan. Its 0.36 drag coefficient eclipses many exotic sports cars and coupes in sheer wind-cheating efficiency–a crucial feat, when every gain of 10 percent in aerodynamic efficiency can yield a gain of three to four percent in fuel economy.

But for Mercedes-Benz engineers, it is only step one in the exploitation of aerodynamics. They look beyond the numbers game of low drag coefficients, to the way a moving car and the moving air around it interact. They use the flow of onrushing air, as it passes over and around the car, to perform vital extra functions.

In brief, they put aerodynamics to work. Extending the science of cheating the wind to include the idea of *harnessing* the wind.

Study the diagram at left. As that Mercedes-Benz sedan forges ahead through the storm, aerodynamic science is being used to sluice rainwater away from its side and rear window glass.

The shell of its outside mirror has been aerodynamically shaped to help conduct swirling rain and slush away from the mirror surface itself.

The taillight lenses are deeply ribbed to resemble washboards: not a styling trick but an aerodynamic trick, meant to keep the recessed grooves clean by sheltering them from the vortices of airborne water (and mud and slush) in the car's slipstream.

Aerodynamically stable

Wet weather or dry, aerodynamics helps to exert a constant *downforce* on the front axle of a Mercedes-Benz as it moves along–countering a natural tendency of the front end to "lift" as speeds rise and more firmly bonding the tires to the road.

The car's body side configuration is aerodynamically critical. Correct shaping can help resist the sudden force of violent sidewinds, invisible blows that could jar a car off its true path.

A Mercedes-Benz utilizes aerodynamics to continuously cool specific heat-sensitive electronic components under its hood. To feed fresh air into the cabin while silently extracting stale air. To prevent irritating drafts and pressure imbalances in the occupants' ears, by maintaining a constant level of cabin air pressure at all speeds. To draw exhaust gases away into the airstream behind the car.

A Mercedes-Benz also employs aerodynamic science to help calm its driver's nerves. Even the outside mirror is shaped to generate minimal wind noise; if the driver experiences an almost eerie absence of wind buffeting and howling as he drives along, credit the presence of rigorous aerodynamic detailing.

Mercedes-Benz believes that cheating the wind in the cause of more fuel-efficient driving is good. But Mercedes-Benz believes that both cheating the wind in the cause of fuel efficiency *and* harnessing the wind in the cause of driving efficiency is better.

And that is the difference between aerodynamics and Mercedes-Benz aerodynamics.

© 1983 Mercedes-Benz N.A., Inc., Montvale, N.J.

Engineered like no other car in the world

in the past. In the Sixties the success of Group W, the company's innovative broadcasting division, prompted chief executive Donald Burnham to embark on "people-oriented" diversifications like the Longines Symphonette Society, factory-built housing and water quality control. Plagued by poor management and inadequate controls, these all lost big money.

Also in the Sixties, Westinghouse contracted to sell uranium it did not own for an average price of $9.50 a pound. To fill its commitments, the company was forced to buy on the open market at $43 a pound. Result: nearly $1 billion in damage payments and legal fees.

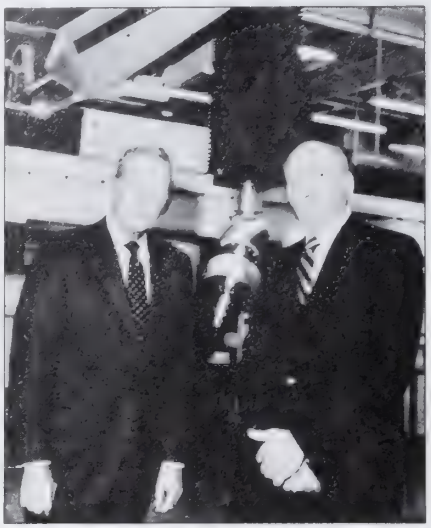
During the money crunch of 1974, Westinghouse even had trouble rolling over its commercial paper, and there were whispers of bankruptcy. Cleaning up the mess was Kirby's first task when he took over in 1975.

That done, he set about altering the mix of Westinghouse's businesses. He made some hard decisions. In a few years he lopped off 22 low-profit or no-profit subsidiaries with annual sales of $1.5 billion. These included major appliances, light bulbs, lighting fixtures and air-conditioning systems. These were wrenching changes: Westinghouse, after all, had been an American pioneer in several of these fields.

At the same time, Kirby shelled out big money to shift Westinghouse into newer markets. In 1981, for example, Westinghouse paid $646 million for Teleprompter, then the nation's largest cable television system. Kirby promptly put in another $250 million to upgrade it. Early this year Kirby continued his plan by paying $107 million for Unimation, the nation's largest robotics manufacturer.

Why does Westinghouse pay handsomely for acquisitions instead of developing expertise and hardware in-house? Simple. Kirby was playing catch-up ball. He did not have the time to start from scratch, but he did have the money and the technological savvy to try making up for lost time. Nor was he diversifying blindly. Teleprompter, for example, complements Group W nicely and hedges against a future when over-air broadcasting may become outmoded. Buying Unimation—and perhaps one or two related companies later this year—will make Westinghouse strong in computer-assisted manufacturing, an area where GE also sees major potential.

To manage its new businesses better, Westinghouse has dissolved four of its five operating groups and created three new ones: energy and advanced technology, which represents $4 billion in annual revenues and includes hot fields like defense, robotics and advanced electronics; industries and international, which accounts for another $4 billion in revenues and handles industrial products and power systems; and commercial, with $1.5 billion in revenues, which contains stand-alone operations like soft drinks, watches and real estate that do not require centralized management.



Robert Kirby and Douglas Danforth
Shifting to newer markets.

Westinghouse Broadcasting & Cable remains separate.

Shuffling people around, of course, doesn't improve the bottom line, and low profitability has long been a Westinghouse problem. Last year the company's operating margin was 6%, compared with GE's 9%. But the trend is in the right direction. Return on shareholders' equity at Westinghouse rose from 8% in 1974 to 16% last year, while total debt less cash fell to 16% of total capital from 49%. Accounting practices are tighter, too.

"Now Westinghouse should be able to absorb any unpleasant surprises that come its way," says Paine Webber analyst Robert Cornell. "That became evident last year during the recession, when Westinghouse's operating profits held up reasonably well."

For this, Kirby can thank his revitalized defense division. During the Vietnam War, some Westinghouse defense products were disasters. Its Mark 48 wire-guided torpedo made headlines because of cost overruns, for example, and the company soon lost the contract.

Today, however, Westinghouse's fire-control systems for the F-16 and Airborne Warning and Control System (AWACS) are state-of-the-art performers and in demand by the Defense Department. Overall, Westinghouse is the 17th-largest Pentagon supplier, up from 21st in 1975. (In its 1967 heyday the company ranked 14th.) Kirby now expects defense revenue to double, to $3 billion, by 1987, something that should provide $200 million, or 20% of pretax profits.

Group W Cable, meanwhile, is doing well. It should contribute $250 million, or 25% of pretax profits, over the next five years. Much of that success stems from marketing. "Cable must be sold aggressively," says Group W chief Daniel Ritchie, who is bringing big-business methods to the game. Westinghouse has hired 2,000 salesmen to make cold calls at houses where Teleprompter lines are available and residents have not signed up. Result: The number of Teleprompter subscribers has risen from 1.3 million in 1981 to 1.9 million today. More important, fully 70% of these subscribers are taking add-on services that have raised the typical monthly payment from $9 to $17.

As fast as this money comes in, Westinghouse spends it. The company's capital budget this year amounts to $725 million, or 7.5% of sales. That's twice the industry average. Funds are going to upgrade manufacturing operations and cable, but cable gets about 45% of the total.

Westinghouse will double the size of its systems, from an average of 12 channels today to at least 24 by early 1984. That will cost $150 million. Kirby is also pouring $100 million into video programming, a field where Westinghouse has long been successful. The company is backing the Nashville Network, a 16-hour-a-day, mostly music cable service, as well as the 24-hour Satellite News Channel. Nashville Network could make money next year, but the payoff on SNC will come harder.

If it doesn't come at all, expect Westinghouse to take a tough line. In the past, many of its problems stemmed from an unwillingness to cut losses; Kirby has changed all that. Last fall the company's joint venture with Walt Disney Productions to develop "family-oriented" programming came unstuck. A few weeks later Westinghouse sold half its interest in Showtime, a pay-TV service, to Viacom for $75 million. Shrewdly realistic, Kirby realized that his company couldn't do everything. Says analyst Martin Sankey of First Boston: "Something had to be emphasized. They were spending too much."

What about the older businesses, the ones where Westinghouse long ago made its name? As recently as 1980 the power systems group pro-

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DHL, #1 Worldwide Courier Express, now makes time-critical deliveries overnight throughout the U.S.

While other companies were still hand-counting bags of mail, A.C. Nielsen Jr. was finding new ways to gather vital marketing information for America's business via computer.

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"For overnight deliveries of time-critical data anywhere in the U.S., I can count on DHL—their figures speak for themselves," says Nielsen.

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For information, call your local office of DHL Worldwide Courier Express.

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"Let's call BarclaysAmerican/ Business Credit."

BarclaysAmerican/Business Credit has the resources and the experience to respond quickly to your company's borrowing needs.

Unlike banks, which rely on historical credit strength, we lend on tangible and intangible assets. This allows us to provide you with the cash your company needs today.

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We have more ways to lend money.

For short term, revolving and current asset loans dial **1-800-BARCLAY.**

For intermediate term, real estate and fixed or intangible asset loans dial **1-800-243-LOAN.**

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Offices located nationwide. Corporate Headquarters: 111 Founders Plaza, East Hartford, CT 06108

vided over 40% of the company's operating earnings. By 1987 that figure should drop to about 15%.

Nuclear operations, on the other hand, are doing better than many outsiders realize. "People don't understand that this is still an excellent business for us," says Kirby. How come? There will soon be some 85 nuclear plants operating in the U.S., all of which require servicing and fuel. As the world's leading reactor manufacturer, Westinghouse claims a 50% share of this systems support market. For the future, Kirby expects even better prospects. "We'll eventually go back to building nuclear plants," he predicts. "Otherwise, the American economy will stop moving."

When Douglas Danforth, Kirby's successor, takes over in December, he will be in an unusual position for an incoming Westinghouse chief executive—running a corporation that is not in the throes of a crisis. But Danforth, too, will have his work cut out for him. Last year Westinghouse earned $449 million on sales of $9.7 billion, but GE made five times as much money on less than three times the revenues.

"Cable must be sold aggressively," says Group W chief Daniel Ritchie. Westinghouse has hired 2,000 salesmen to make cold calls at houses where Teleprompter lines are available and residents have not signed up.

Danforth will be working to narrow the gap—even if he cannot close it—and there are reasons to believe that he can succeed. Westinghouse is financially sound and knows where it wants to go. Danforth leads a top-notch executive team. Dan Ritchie, 51, has run broadcasting operations well for two years, and critics are impressed by his success with Teleprompter. Thomas Murrin, 54, is a Fordham graduate who once played football for Vince Lombardi. He heads the recently successful energy and advanced technology group. Another is John Morris, 57, president of the industries and international group, who joined Westinghouse in 1949. One of these men should soon get the number two corporate job.

It's not easy to run a company that everyone inevitably compares with General Electric. But say this for Bob Kirby: The comparisons are a lot less invidious than they used to be. ■

In Tokyo, one hotel's guest register reads like a Who's Who in the world of business and finance.

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Bracket creep has driven schoolteachers and truck drivers, to say nothing of high-paid executives, running to tax-exempt bonds for shelter. But there are worse things than paying taxes.

Whoops!

By Howard Rudnitsky

WHAT'S John Nuveen & Co., a municipal bond firm, doing with a full-page ad like this? A Brooks Brothers-clad fellow shown with his two prize possessions—a vintage auto and an attractive lady—and telling the reader, "I'll really be able to pursue my passions with a passion." Above the happy threesome, good, old-line Nuveen's headline reads, "In the old days people bought tax-free municipal bonds after they got rich. Now they're a way to help you get rich."

That's conservative compared with some recent municipal bond ads.

Yes, the carnival barker has come to the once staid municipal bond market. The small to medium-size investors—now accustomed to high yields, but shocked by their latest Form 1040s—are on the midway in force and pushing eagerly toward the tent. Inside, the crowd sometimes gets value for its money. Sometimes it gets a freak show.

Municipal bond promoters, using a hard sell, are tapping into a powerful trend: inflationary bracket creep that forces middle-income folks to act and think like the rich. A couple—say an engineer and a teacher—earning a combined $50,000 a year is almost into the 40% tax bracket. As might be an auto worker with seniority and his working wife.

The arithmetic is simple. If such individuals buy a taxable fixed-income instrument yielding 10.75%, or open a money market bank account at 8%, they give close to 40% of that to the U.S. government. If they buy a long-term municipal general obligation bond yielding 8.7%, they pay only state income taxes—and not even that if the issuer is from their state.

And some people find tax-exempts a handy way to avoid paying even state income taxes with the least bit of encouragement. A recent sales pitch: "People who pay taxes are crazy, especially in New York. If it's a bearer bond, nobody's name is on it. Who the hell knows about it except you? I won't tell anybody."

"The buyers today aren't coming from Park Avenue or Scarsdale," says municipal bond dealer Roy Beck, referring to a couple of New York's posher areas. Never mind that Frederick Stoever, head of Stoever Glass & Co., argues that people earning less than $80,000 to $90,000 a year "probably shouldn't be in the municipal bond market. We don't look for customers who have less than $50,000 to invest." There is a mass passion at work here. Last year individual investors accounted for over 75% of the $61 billion of net new purchases. Today such investors own about $170 billion face value of outstanding muni bonds, compared with only $80 billion in 1980.

That growth has also been wonderful for municipal bond firms. Last year Chicago's John Nuveen & Co. (owned by insurer St. Paul Cos.) earned $32 million, more than three times the prior year's record results, largely from selling $3.2 billion of unit trusts. Another big unit trust packager, privately owned Van Kampen Merritt, which has sold over $2.5 billion worth since 1979, earned some

Municipal bonds take to the tube in these typical commercials
Selling investments like soap—and spending big to lure the uninitiated.

"We need a very high-speed 32-bit computer but
won't pay mainframe prices. Does anyone make a
7 MIPS minicomputer with user-friendly software?"
"Gould."
Gould is concentrating its interrelated technologies and products in six rapidly expanding electronics markets: high-performance 32-bit minicomputers, factory automation, test and measurement, medical instrumentation, defense systems, and electronic components and materials. Over the next decade, these worldwide markets should outpace the rest of the electronics industry. For more information about our growth strategy, write: Gould Inc., Department A, 10 Gould Center, Rolling Meadows, IL 60008.
GOULD
Electronics

$20 million before partner taxes on capital of $35 million.

Large wirehouses like Merrill Lynch, Bache, Shearson, Smith Barney and E.F. Hutton don't break out results by lines. But Merrill Lynch alone sold $5 billion of municipal unit trusts and managed or comanaged more municipal bonds ($28.5 billion) than any investment banker. Then there were secondary municipal sales and inventory trading profits, all adding up to a banner year for Merrill Lynch.

For the industry, gross underwriting spreads on new municipal issues averaged over $20 per $1,000 bond, or 2%, compared with about 1% for corporate bonds. On some $78 billion of gross new long-term muni bond offerings last year, that generated over $1.5 billion in underwriting fees. Other municipal bond-related trading fees and sales commissions probably produced another $3 billion or so.

Growth has been wonderful for municipal bond firms, with $78 billion of gross new long-term offerings last year. Underwriting spreads, trading fees and sales commissions probably generated $4.5 billion in revenues.

A significant hunk of the commission goes to the hordes of muni bond salesmen. Last year the average retail muni salesman probably earned about $75,000. The better salesmen can earn well over $100,000 a year.

So, it is not surprising that firms like David Lerner Associates, E.G. Francis, Herreth Orr & Jones, Multi-Vest and others take out advertisements screaming, "A Yield Equivalent of up to 25% After Taxes" or "14.5% Tax-Free Income, Double A Rated Premium Bonds." Such ads are known as customer grabbers. They grab well these days.

Recently FORBES dialed a few of the phone numbers. One fellow was peddling some unrated revenue bonds issued by a group of Pennsylvania nursing homes. There's a good deal of that kind of merchandise around lately.

Trouble was, the salesman was trying to sell the nursing home bonds without the required, but not-yet-issued, prospectus-like offering circular. What the salesman sent us was the shorter, more sales-oriented offering memorandum. The salesman claimed most of the issue had already been sold, but if the customer hurried and sent in the money along with the required forms, there might be a few

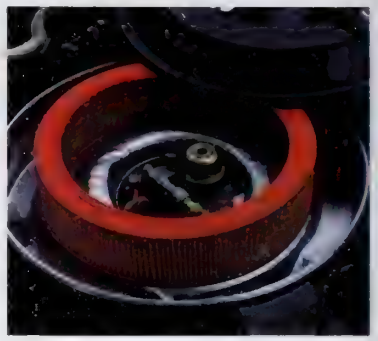
You only need to

Those who prefer comfort and room for six, read this half.

Ford LTD Crown Victoria... you can still own this much car. Here is interior comfort for six people; comfort that comes from deeply padded flight bench seats with dual recliners and fold down armrests. At your option they can be trimmed in SuperSoft vinyl, velour or genuine leather. For your additional convenience your LTD Crown Victoria can include options that range from the latest generation of Ford electronic stereos to Ford's Tripminder® Computer.

The comfort of Crown Victoria's smooth, quiet ride comes from a full coil-spring suspension and a full steel frame coupled with Ford's Super Luxury sound insulation package.

But, beneath the comfort is a remarkably well-produced machine. The smooth power of a 5.0 liter (302 cu. in.) V-8 engine is standard as is Automatic Overdrive transmission and electronic fuel-injection (shown below). Adding the optional heavy-duty trailer towing package allows you



to tow up to 5,000 lbs.

This is a prime example of the classic American sedan. You can still own this much car...an LTD Crown Victoria from Ford. And, ask your dealer about savings that are available on specially equipped LTD Crown Victorias.

Have you driven a Ford... lately?

Ford

ead half of this ad.

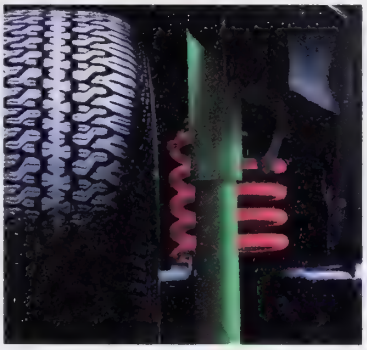
Those who prefer a contemporary size with crisp handling, read this half.

Ford LTD for 1983. It's a Ford engineering statement that brings together the comfort and room of a family car with the handling capabilities of a driver's car.

LTD's new suspension combines Ford's gas-filled shocks (shown at right), modified MacPherson strut front suspension with a front stabilizer bar, power front disc/rear drum brakes and rack and pinion steering. It's a ride and handling system that produces the ride you expect from a family car, with the responsiveness and agility you may not have expected.

Inside you'll find front seats designed to provide comfort with firm support. Instrumentation has been carefully placed for driver convenience.

And, while functional design is of primary importance, style and elegance have not been over-looked. Seats are finished in rich cloths. The carpeting is deep and plush.



And, generous amounts of sound insulation have been engineered into the new LTD's design. And, ask your dealer about savings that are available on specially equipped LTDs.

The new LTD for 1983... comfort when you want it and capability when you need it.

Get it together—Buckle up.

Have you driven a Ford... lately?

Ford

bonds left. Even if there weren't, he hastened to add when we demurred, there would be another issue like it coming along soon.

A few other firms were hawking Washington Public Power Supply System bonds. Yes, the beleaguered WPPSS bonds, only a month or so before the system faced possible default because it may yet run out of funds to pay the interest on two of its power projects. Not to worry, the New York-based executive cheerfully intoned when we expressed alarm, "These are the 1, 2 and 3 bonds we're offering, not the 4s and 5s that are facing those problems. These bonds are perfectly safe, and they're rated double A by Moody's." Of course, the courts have yet to rule on whether the "perfectly safe" bonds ought to be thrown into the same pool with the 4s and 5s if they should default. Moreover, shortly after his reassurances

Leaving aside such hazards as the possible WPPSS default, things can still be tough for the investor. The municipal bond market is easier to get into than out of, especially in small investments of $15,000 or less.

Moody's cut its rating on the $6 billion of 1, 2 and 3 bonds to Baa, while Standard & Poor's suspended its double-A rating on the bonds because it feared the entire WPPSS system would file for bankruptcy shortly. The bonds sold off sharply.

Even leaving such hazards aside, things can still be tough out there for the lone investor. The municipal bond market is a lot easier to get into than out of, especially in small amounts like $15,000 or less.

Spreads in the secondary market can run 3.5% to 4% in some instances. This means a small investor who had to sell a few bonds would have to give up about $500 on a $15,000 investment, even if the market didn't move against him. Says a bond consultant, "Often, spreads are really unconscionable. There are so many issues, and markets are pretty thin in many of them. So if a dealer is going to lug a position, he really wants to be paid." As if that weren't enough, some muni dealers are occasionally tempted to ignore certain practices. Like the NASD-mandated limit of a 5% markup on the resale of a muni bond. A bond man told FORBES: "Look, if the NASD ever came and said, 'You priced those

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No-load municipal bond funds: a sampler

Listed below are 12 no-load open-end municipal bond funds. The funds range in size from $9 million to $1.6 billion, and the annualized yield ranges from 7½% to over 10%. Generally, the higher the yield, the greater the risk. The last column lists phone numbers, so investors can obtain more information. For a detailed listing of no-load municipal bond funds, see the FORBES Annual Mutual Funds Survey *(Aug. 30, 1982).*

Fund	Total net assets (mil)*	Percent yield†	Telephone
Babson Tax-Free Income Long	$ 8.7	8.6%	800-821-5591; in Kansas City, 913-821-5591
Composite Tax-Exempt Bond Fund	51.1	10.2	800-541-0830; in Seattle, 509-624-4101
Dreyfus Tax Exempt Bond Fund	1,595.8	8.6	800-645-6561; in New York, 212-895-1206
Fidelity Municipal Bond Fund	719.1	8.4	800-225-6190; in Boston, 617-523-1919
Financial Tax-Free Income Shares	59.0	8.7	800-525-9831; in Denver, 303-779-1233
Midwest Group Tax-Free Trust Ltd	16.4	6.5	800-543-0407; in Cincinnati, 513-579-0414
Nuveen Municipal Bond Fund	233.9	7.7	800-621-7227; in Chicago, 312-621-3000
T Rowe Price Tax-Free Income Fund	919.2	8.7	800-638-1527; in Baltimore, 301-547-2000
SAFECO Municpal Bond Fund	22.4	8.6	800-426-6730; in Seattle, 206-555-5530
Scudder Managed Municipal Bonds	396.1	9.0	800-225-2470; in Boston, 617-426-8300
SteinRoe Tax-Exempt Bond Fund	179.3	8.1	800-621-0615; in Chicago, 312-368-7831
Vanguard Municipal Bond—Long Term	210.7	8.6	800-523-7910; in Valley Forge, 215-964-2600

*As of Mar. 31, 1983. †As of Apr. 30, 1983

Yield source: Lipper Analytical Services.

bonds at more than 5% off the market,' a muni dealer can say, 'What market? You show me where the market was.' "

The WPPSS power revenue bonds' financial difficulties clearly are a warning. They point up the deterioration in credit issuer quality in recent years, particularly with revenue bonds. During the past 15 months there have been 252 more credit downgradings than upgradings by the rating agencies. And credit ratings are likely to worsen before they improve.

Under these conditions, the best bet for a small investor is buying part of a package of professionally selected munis. One way to do this is through unit trusts, portfolios of 15 or so different municipal bonds. Unit trusts found their way to investors to the tune of $13.5 billion in 1982, at an average crack of around $15,000. But the unit trusts have their drawbacks, too.

"Some naive investors recently plunged into high-yielding tax-exempt unit trusts," says Joseph Gabriele, president of the muni bond firm of Gabriele, Hueglin & Cashman, "thinking they could get out at any time at the price they paid, as if it were a short-term money fund. I'm not so sure many salesmen carefully explained the difference."

The salesmen also may not tell you that bond firms typically mark up prices on each bond and put them into the unit trust portfolio. And there they sit for the life of the trust, which tends to run 25 to 30 years. The markups, from one-half of 1% to as much as nine-tenths of 1%, help cushion the packagers against a possible decline in bond prices before the units are sold. And they yield a nice little profit if they don't fall. Last year they probably made about $600 million on those markups.

That's only the beginning. Most charge a 4.5%—some as high as a 5.5%—front-end sales load. Larger investors ($100,000 to $250,000) pay lower sales commissions. Unit trusts usually don't levy a resale fee, but you get out generally at the lower bid price. That can run from 15 to 20 basis points.

Then there are custodial and trustee charges—and if the trust is an insured one, the insurer gets up to 35

Double standard?

When Robert Adler, 27, first became a municipal bond analyst five years ago, most of his friends yawned. Now, he says, "at cocktail parties people hound me about where they should invest their tax-exempt money."

As manager of municipal research at Shearson/American Express, Adler relishes the chance to boast how quickly municipal bond research has become a staple of brokerage houses. Why do research when there are bond-rating agencies like Moody's and Standard & Poor's? Adler points out that the agencies failed to anticipate New York City's 1975 fiscal crisis and the more recent teetering of the Washington Public Power Supply System's Projects 4 and 5.

But the brokers, too, were late in pointing out the WPPSS problems, at least to retail clients. "There was a lot of dragging of feet and wishful thinking," admits Shearson's Adler.

Even more than in equity research, pressures abound for research departments not to be too critical of municipal bond issues, especially when the brokerage firm happens to be the issuer's underwriter. Many firms, in such cases, will not publish credit reports. "It's a no-win situation," explains an analyst at Merrill Lynch, which managed or comanaged most of the $8 billion WPPSS has raised. "If we put out something positive, our institutional investors will be suspicious that we're just plugging our client. If it's negative, our competitors will use it against us with the issuer." So the cop-out at some firms is to report credit problems internally to salesmen and traders, who can verbally warn big clients.

The retail customers are pretty much on their own in cases like this.—**Jayne Pearl**

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basis points—which come off the yield. So the unit trust investor can pay heavily—total charges of more than 5% the first year—for getting some diversification and being able to buy in for as little as $5,000 or less in some cases.

Says Stoever, "Because of all those charges, if you have to sell in three years and interest rates are roughly the same as when you bought the trust, you'll wind up with a loss." So, unit trusts are not for everybody, least of all for people who can't stay with the package for more than ten years. Even those who can stay around for the life of the trust, however, run a sizable interest-rate risk.

Credit quality can also gradually deteriorate in the unmanaged unit trust. Yet bonds are removed from unit trusts typically only when interest payment default is clearly imminent—when it's far too late. That's

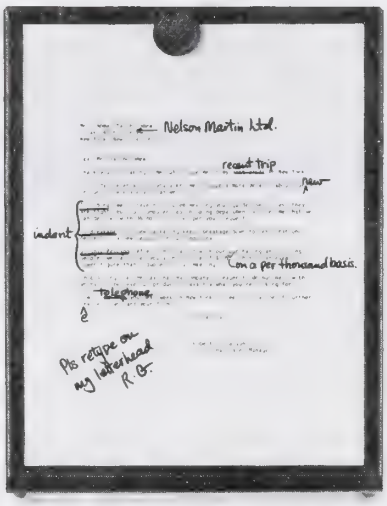
Sums up one municipal bond consultant: "What I don't like about muni trusts is that people selling them don't have a long-term economic incentive to work for me, like a money manager who gets a fee every year."

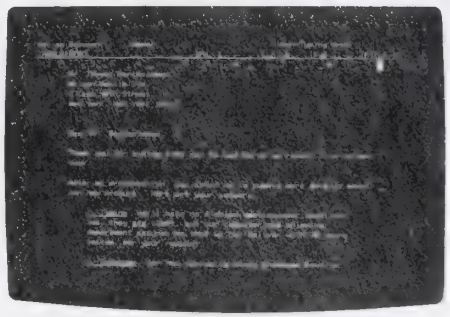
why so many WPPSS bonds still are in unit trust portfolios. Among others, Merrill Lynch, Bache, E.F. Hutton, Smith Barney, Van Kampen and Nuveen put hundreds of millions of dollars' worth of WPPSS bonds into their unit trusts. A number of Merrill Lynch's unit trusts, for example, have up to 7% of their assets in WPPSS bonds. Unfortunately, the packagers opted for high yield over much broader diversification.

Sums up one bond consultant: "What I don't like about muni trusts is that the people selling them don't have a long-term economic incentive to work for me, like a money manager who gets a fee every year."

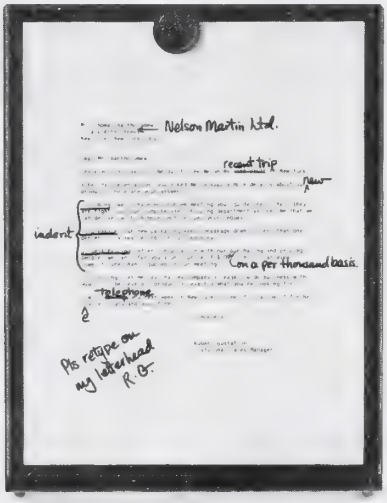
Which brings us to what may be a better bet for the small investor—and in this field under $100,000 is still a small investor. The bond consultant recommends no-load, open-end municipal bond funds. An investor in an open-end mutual fund does have to pay annual management fees ranging from six-tenths of 1% to nine-tenths of 1%, but he gets some service for his money. That annual cost partly explains why their yields tend to be about 75 to 90 basis points lower than trusts'. But the investor gets continuous management, an important value

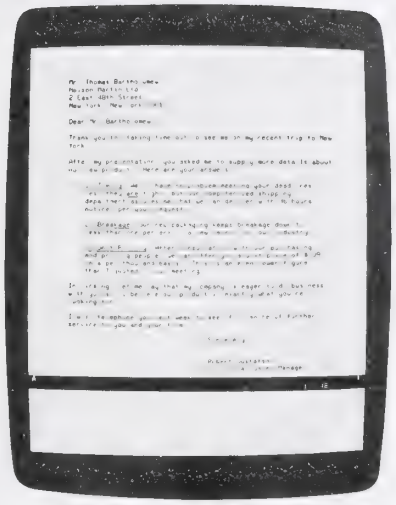
Most word processor screens cause 12,000 tiring dilations of the eye per day.





CPT's doesn't.





For some reason, most word processors have dark-colored display screens.

Which means the people who use them have to look back and forth between a dark screen and white paper all day—as much as 12,000 times a day.

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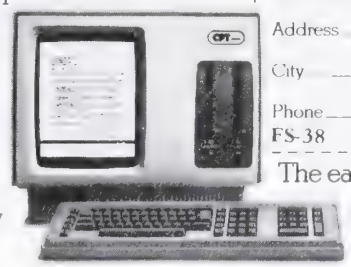

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when bond quality is deteriorating. Moreover, according to Michael Lipper, head of Lipper Analytical Services, "The average open-end fund has more diversification, more interest rate protection and better liquidity than the average unit trust." That is because an open-end fund has the flexibility to vary maturities.

And with a no-load municipal bond fund, the investor can get in or out without paying a commission and not be hit with the heavy markups that unit trusts impose. There are at least 22 no-load muni funds currently in existence and lots more open-end municipal funds with loads ranging from 2% to 8½%. Both have seen their assets rise sharply over the last few years. These bond funds won't relieve investors of all market risks, but they may help narrow them. A listing of no-load muni funds can be found on page 65. ■

As I See It

Why Britain's Chancellor of the Exchequer opposes a new Bretton Woods conference. And why he devoutly hopes the U.S. will slim its budget deficit.

"We don't need new machinery"

An Interview with Britain's Sir Geoffrey Howe

By Lawrence Minard

France's François Mitterrand, his socialist program a shambles, his currency in shreds and with rioting in his streets, has called for a new Bretton Woods monetary conference. You don't have to be a cynic to understand what Mitterrand wants. He wants the world to bail him out from the consequences of his economic and social folly. But does the world really need a whole setup for regulating international currencies? Malcolm S. Forbes Jr. and Lawrence Minard recently interviewed Sir Geoffrey Howe, Margaret Thatcher's Chancellor of the Exchequer, on this very point. Excerpts follow:

Is it possible to get a real revival in trade without some sort of new Bretton Woods international monetary arrangement? Do we need a new international monetary system?

Howe: Let me unstitch the phrase "Bretton Woods," because it gets tossed into the debate as a kind of "open sesame." Bretton Woods did several things. It established fixed exchange rates. It established an international financial institution to fund countries. It represented a coming together of the monetary authorities of the key countries, with a common concern for the world. And it took the form of a great universal conference.

Now, many people think there may be some benefit to be derived from "a new Bretton Woods"—that is, a vast new conference. But I don't think that's possible if you actually want to get things done, for two reasons. One, the World Bank is now 140 countries, compared to a much smaller number in 1944. Two, the world has already got in place international financial institutions. We don't *need* new machinery. We don't need a great conference starting from scratch. But we do need to regenerate the other component of the original Bretton Woods: the common concern by the world's key financial parties. We don't want to redesign the institutions. We want to demonstrate our common concern for the international financial system. It would certainly be desirable to move toward a world of less exchange rate volatility. But what we need now is to strengthen the existing financial institutions.

Sir Geoffrey Howe
Needed: international discipline.

Do you see this happening? Do you see the nations beginning to pull together again?

Howe: My main concern, I must confess, remains the uncertainty about the future prospects of the U.S. federal deficits. Apart from the moderation in oil prices which has taken place, nothing could do more to restore the prospects for sustainable growth for the world economy than a convincing performance by the U.S. in putting its federal deficits on a downward track. If the Euromarkets and world markets were convinced that deficit was going to be firmly under control and the structural deficit coming down, that would do a great deal to diminish the risk of a recurrence of high and rising interest rates.

Some argue that under Bretton Woods, an important reason we had a good degree of convergence was the imposition of discipline forcing governments to take certain responsible, if domestically unpopular, actions.

Howe: That's absolutely right. International financial discipline was founded essentially on the fiscal management of the U.S. with the dollar as cornerstone; it broke down when Bretton Woods broke down. Thus, countries have gradually had to seek different foundations for their own domestic stability. And countries have generally done that by putting in place a monetary policy. But that only secures a domestic framework of discipline.

I think we have to try to recreate a

sense of international discipline. *Not* by jumping from where we are now back to a fixed exchange rate system—for the simple reason that we can't do it—but possibly by putting in place the means for more dialog and discussion between countries.

If we can gradually create a framework of rules, if you like, to which people can respond, I think that would help to diminish the volatility we now have in the international monetary system. If you are a businessman, you want two things: You want a national currency that holds its value and you want international currency arrangements that are more stable rather than less stable. We have moved a long way from that [stability]. We are gradually moving back in the right direction.

Now, many people think there may be some benefit to be derived from a "new Bretton Woods"—that is, a vast new conference. But I don't think that's possible, if you actually want to get things done.

You don't see any return to the gold-standard feature of Bretton Woods?
Howe: I don't see that. I don't think it's in the foreseeable future.

Talking about the IMF and the criticisms that have recently been leveled at it, aren't we in danger of creating a system that just bails out imprudent borrowers and lenders?
Howe: I see the danger. But I don't think it's actually working that way. I don't think it's anything like the automatic relief mechanism you've just described. If one were to put in place the kind of international entitlement program in which the debtor automatically came and automatically got help, the risk would be significant. But it isn't like that at all. It's a very tough bargaining process for the borrowers and lenders and the Fund. I don't think anyone is operating with an irresponsible feeling that everything will work out all right, come what may.

Well, what about the commercial banks? Won't they just have the feeling they can make whatever sovereign loans they like, and somehow those loans will always be made good?
Howe: No, because nobody can have a complete assurance that everything will always be made good. I think the banks are more cautious than they were. At the same time, they don't want to move so far into caution as to precipitate insoluble difficulties to the countries they have been lending to. It's all part of the process of squeezing inflation until it's over and out of the system.

When many of us were in school, the economics professors taught the so-called Phillips Curve: The only way to fight inflation seriously is to suffer through a period when unemployment is abnormally high. Britain seems proof of that doctrine.
Howe: Well, it's true of the whole world's experience, isn't it? If you look at the way the unemployment figures have been moving in virtually every Western country, it's exactly the same pattern. Unemployment in the Federal Republic [of Germany] has been rising much faster than here recently. Belgium has higher unemployment than we do. I think that what we're all realizing, on a worldwide scale, is that beating inflation is a very uncomfortable process. And this unemployment isn't the price we're paying for fighting inflation now. It's the price we're paying for having put off unemployment in the past.

Does it follow, then, that when employment picks up again, so will inflation?
Howe: No. One of the errors people tend to make is in expecting a repeat of the pattern of the average American postwar recovery. Of course, so many of the postwar recoveries were inflation-based. But what we're trying to do is put into place a recovery that is not inflation-based, by not injecting new demand in the conventional—I should say *formerly* conventional—fashion.

Does this mean that the recovery, because it is not artificial, will be slower than what we've become accustomed to in the postwar period?
Howe: Yes. I think it is likely to be slower. But more sustainable. And that's the object of the exercise. Unemployment is bound to remain high, and bound to be slow coming down. Each [British] government, from 1959 onwards, has ended up with a higher level of unemployment than its predecessor, and a higher average rate of inflation.

We shall be the first government since the end of the 1950s to leave our successors—who I hope will be us after the [June 9] election—with a lower average rate of inflation. ■

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While the bankers are worrying about repayments on their Latin American loans, the fact is that a surprising amount of all of the billions of dollars they have lent was wisely invested.

South American debt—now look at the assets

By Geoffrey Smith

FROM THE POSH boutiques of Buenos Aires to the earsplitting traffic jams of Caracas and the crowded beaches of Rio de Janeiro, the question is always the same: How will the foreign bank debt be dealt with?

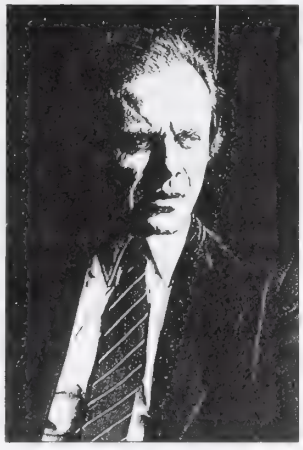
Practically every Latin economy lies in ruins in the wake of a great tidal wave of foreign capital, far larger in constant dollars than the fabled Marshall Plan. Foreign banks, chiefly American, urged dollars upon the South American continent, raising its external debt from $27 billion at the beginning of the Seventies to $300 billion by 1982. Over two-thirds of that $300 billion came from commercial banks, bulging with a sudden flood of petrodollars pouring into an already enormous Eurodollar overhang. Where to lend it? South America was the obvious answer. It had relatively advanced economies and a thirst for capital.

The South Americans could scarcely believe it: "For years we had been begging for money," says a South American newspaper editor, "and for years you had been promising it to us. But it never came in the amounts we needed. Not under the Point Four Program, not under the Alliance for Progress, not under AID. And then, suddenly, there it was . . . cheap—all the money we'd been asking for. We might not have known what to do with it all. But we sure took it. It was a chance that might never come again."

The damage done by that sudden infusion of billions and billions of dollars has shaken the world's financial system. First, last autumn came the news that Mexico could not meet the interest payments on its $80 billion debt. It did not take long to see that the rest of the Latin American "exposure" was in the same boat. For the nine largest U.S. banks, loans amounting to well over 100% of their equity had turned bad.

Too late the bankers realized they had made two critical mistakes: First, they had offered the South Americans much shorter-term loans than they were used to. Second, they had priced those loans at low but variable rates. The variable feature was there to protect the banks, but it proved a trap for the Latin Americans once the U.S. decided in earnest to fight inflation. By 1979 a worsening global recession triggered by anti-inflationary monetary policies had driven interest rates up and commodity prices down. The interest cost of existing debt tripled, and, because of the unprecedented rise in oil prices, the revenue from hard-currency-earning exports was cut in half. It was bankruptcy, but neither the Latin Americans nor the banks could face it.

In prior years such foreign debt problems had often been solved by simply changing Ministers of Finance. As Paulo Rabello de Castro of the renowned Getulio Vargas Foundation in Rio put it, with more than a little irony: "When the foreign banks had no confidence in us, we changed the government, put in people who spoke good English and had earnest faces, and pretty soon everything was all right again." But this time that simple ploy won't be enough.



Oris de Roa of Argentina
"Perhaps 80% of Brazil's borrowings are in fixed investment. But only 30% of Argentina's are."

Today, neither Brazil nor Argentina is able to pay the interest on its huge debt, which is $83 billion in Brazil and $39 billion in Argentina. Both are faced with runaway inflation (well over 100% annually) and desperately struggling to reschedule their external debt. Even oil-rich Venezuela was forced recently to request a rescheduling of its $12 billion foreign borrowings. The reason is obvious: "If our monetary reserves continue declining as rapidly as they have been recently," says Venezuelan economist Pedro Palma, "we'll deplete our reserves in just five months."

Why rich Venezuela? Explains Palma: "Actually, our main problem at the moment is that the percentage of short-term debt in our foreign borrowings is higher than that of the others in the big four debtor nations: Brazil, Mexico and Argentina." To appreciate how bad Venezuela's plight is, consider the fact that nearly one-third of Argentina's debt is short term in the sense

"For years we had been begging for money. And for years you had been promising it to us. But it never came in the amounts we needed. And then suddenly there it was . . . cheap. We might not have known what to do with it. But it was a chance that might never come again."

that it comes due this year. There is no way to pay it. The threat of outright repudiation of debt, given the upcoming national elections in Brazil, Argentina and Venezuela, is real. Topic number one at the Williamsburg, Va. economic summit conference of the U.S., Britain, Canada, France, Italy, West Germany and Japan last month was the international debt crisis, of which the Latin loans are the core.

Even politically cynical South American businessmen are deeply pessimistic. "I honestly think the situation is hopeless this time," an Argentine businessman says quietly. "This is the worst economic crisis I've ever witnessed in Brazil, and this time I don't see any way out," says I. Hersz Kahane, who came to Brazil from his native Poland 30 years ago and founded what is now Metalurgica Emesa, a $50 million (sales) diversified trading company. Kahane, a trained economist, has a better perspective on the question than most. Says Kahane's young finance vice president, Emilio Figer: "It doesn't help too much to say today, 'You see, Brazil, you wasted $10 billion on those nuclear plants or I don't know what.' Okay, we wasted it. Let's try not to waste it again."

Kahane of Brazil
"This is the worst economic crisis I've ever witnessed in Brazil, and this time I don't see a way out."

Wasted it? That's the quick answer. It might not be right. Given patience, given optimism, the story may yet turn out to be far from hopeless. Was the $16 billion Itaipu dam, the largest in the world, a waste just because Brazil will not immediately need all the nearly 13 million kilowatts it will generate in five years' time? When they are needed, those kilowatts will cost less than most Brazilian power. "Suppose 20% to 25% of our investments were completely crazy, megalomaniacal," says Brazilian economist Paulo Rabello de Castro. "The other 75% to 80% were good enough. Some of our seemingly megalomaniacal investments may be eaten up very fast, given a good global economic recovery—faster than one might imagine." North Americans would do well to remember how many of their now priceless railroad assets were once bankrupt and redundant.

Many Argentines sing the same refrain: "I don't think we spent funds in a bad way here," says Federico Carles of Carles y Cia, a medium-size, old-line financial institution in Buenos Aires. "Of the $39 billion in foreign debt that we now carry, some $22 billion was spent by the public sector on things like highways and dams. Aerolineas Argentinas bought new jumbo jets. Our railways spent a substantial amount renewing equipment. Our port authorities bought new equipment to handle crops that have increased dramatically in size in recent years." He adds, with less conviction: "And something on the order of $5 billion was poured into the re-equipping of our armed forces."

There is no question that, unlike in Brazil, a substantial portion of Argentina's sharply increased foreign borrowings were consumed, not invested, including that questionable spending on the military. "I would say that, whereas perhaps 80% of Brazil's foreign borrowings remains in the country as fixed investment, only about 30% of Argentina's does," says Carlos Oris de Roa, the Argentine head of Continental Grain's $400 million (sales) South American operations. What happened to the rest? Some was consumed by the Argentine middle class, taking advantage of their overvalued pesos to snap up appliances and Sony Walkmans across the border in Brazil. Much more was used as working capital by Argentine companies under severe pressure from cheap imports and harassed by the government's austerity program. But even in Argentina there was investment, and there might have been more but for constant government efforts to manipulate the economy.

An Argentine garmentmaker sits tanned and trim beside his backyard pool in the elegant San Isidro suburb of Buenos Aires. "When Martinez de Hoz took over as Minister of the Economy in 1977, he told us we were going to mount a huge export drive," he says with a sneer. "So I invested heavily in the latest knitting machinery in order to be able to export to the U.S. Then what does Martinez de Hoz do? This former industrialist? He overvalues the peso in order to reduce inflation in our once closed economy through competition from cheap imports. How can I export with an overvalued peso?" the garmentmaker asks. "I closed my factory. I put the new machines in mothballs. And I imported from Hong Kong and resold to the U.S." Yet today the peso is so cheap relative to the dollar that the garment producer's new knitting machines are running practically around the clock, producing for the U.S. market.

Waste? Venezuelan economist Pedro Palma can tell you where most of his country's money was spent: "When the oil industry was nationalized in Venezuela in 1976, we realized we would have to invest a lot of money in exploration, offshore and in the tar sands of the Orinoco Faja belt. We have

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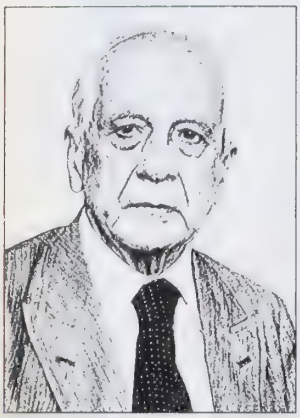
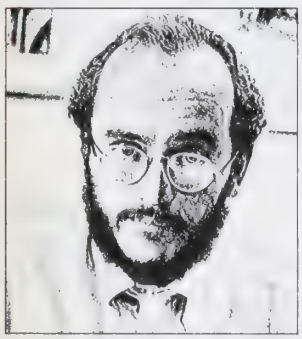


Gouvea de Bulhões of Brazil
"Now the bankers are worried! The time for them to have worried was when they were handing out loans in the first place."



Duran of Brazil
"From 1974 to 1979 Brazil followed a dangerous strategy: to make the economy grow at a very high rate by using foreign debt."

spent the money correctly, and our explorations have been successful—particularly with offshore gas. But all this is very expensive. At the same time we tried to do too much too fast in other areas of the economy. During the oil boom years we decided to quintuple the capacity of our steel industry and the same in petrochemicals, but we didn't have the infrastructure to support that. If you went to the port of La Guaira in those days, you could see maybe 50 or 60 ships at anchor just waiting to be loaded." Such bottlenecks inevitably raised the cost of capital expansion and helped prove its undoing.

The bottlenecks were chiefly caused by time pressures. Here the banks *are* partly to blame. They acted like Santa Claus. And who can resist the old fellow? Brazilian economist Tulio Arvelo Duran of FUNCEX, a think tank in Rio that specializes in the study of export trade, explains, "From 1974 to 1979 Brazil followed a dangerous strategy: to make the economy grow at a very high rate by using foreign debt. So while everyone else was going crazy with the oil crisis, Brazil achieved a real growth rate of 7% a year."

It would have been a shrewd strategy, had it not been for Paul Volcker at the Federal Reserve Bank. Who dreamed the U.S. would push an anti-inflation policy so hard? The Brazilian strategy was based on interest rates that were essentially negative, but under Volcker the rates turned highly positive. "When the interest rate went from 7% to 20%, the cost of our debt service went from $3 billion to $9 billion because we had borrowed on escalating rates like everyone else," says Brazil's Duran.

Argentina made somewhat worse mistakes, springing in part from its Peronist heritage. Federico Carles explains: "In Argentina today, state participation in the economy is nearly 50%, according to our best estimates. We are a socialist country without even knowing it. In such a system you cannot be strict on the private sector, which you can control through monetary policy, and then not also be strict with the state-owned sector—allowing state-run companies to run huge deficits, borrowing money in the open market, competing with the private sector and thus driving up the interest rates." Once an economy becomes highly politicized—state-owned—it becomes increasingly less responsive to market forces.

But there were other mistakes that resulted from mismanagement and corruption and too easy money. Carles: "We went through a period when the Banco Central didn't investigate too deeply the morals or abilities of people who were trying to get into the financial market. So, more new banks were authorized from 1977 on than probably was wise. This resulted in a lot of bankruptcies and very nearly caused a serious financial panic because these people were not bankers. They were lending the funds mostly to their own companies, or using the funds of the public to create new businesses, all of which forced Banco Central to intervene and liquidate some of them."

All this is ancient history to the bankers. It's the repayment of loans that worries them. The bankers get little sympathy from men like Octavio Gouvea de Bulhões, acknowledged father of the erstwhile "Brazilian miracle" and still president of Rio's Getulio Vargas Foundation. "Now they're worried," he says contemptuously. "The time for them to have been worried was when they were handing out those loans in the first place."

But postmortems are not enough. Today the question is: What is to be done now? How can Brazil possibly cope with its $83 billion external debt when half of its export earnings are eaten up by its oil bill and inflation is running over 100% a year? "If inflation continues at 100%, I am sure we will have a crisis," Bulhões replies. "But if we eliminate inflation, and if the world economy improves, then I am sure that there will be no crisis at all, and that in two or three years' time we will have an economy that will vindicate all those who invested in Brazil."

Bulhões recommends an immediate end to Brazil's elaborate system of government subsidies, which now account for perhaps 40% of the government budget. But most doubt that this is politically feasible. Like the leaders of many other developing nations, they are pinning their hopes on a major export drive.

What worries U.S. bankers every bit as much are things like the upcoming Argentine elections, scheduled for Oct. 30. Seasoned Buenos Aires newspaper editors predict "an emotional period" of six years or so, under either the front-running Peronist party or the Radical party. Might this not mean repudiation, not just by Argentina but by a cartel of debtor nations?

Hardly, says the Argentine right wing: "We either abide by what is expected of us by the creditors, or we have to repudiate the

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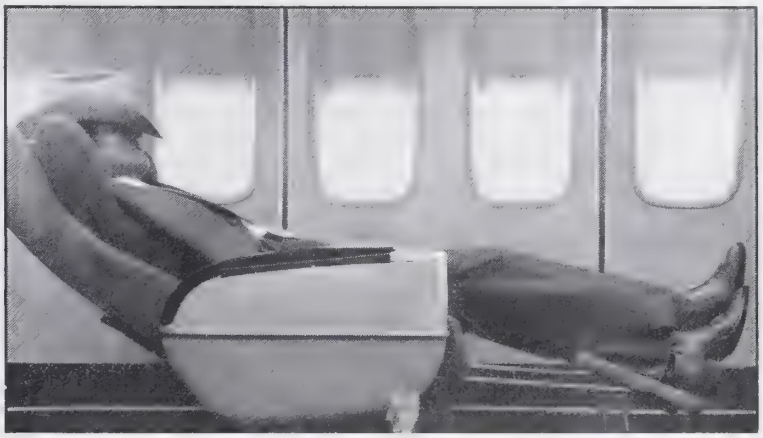

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"The one thing you might criticize in Brazilian strategy was that we were trying to do too many things at the same time without realizing that liquidity could change in the financial markets as it did."

debt, jump the fence and go to somebody else," says Carles coolly. Here the "somebody else" is code for Soviet Russia. "If we repudiate the debt, all our lines of credit would be cut off, and our imports along with them. Somebody else? They don't have the economic power to provide what Argentina needs today. So it would be ridiculous. Besides, there is no political party in Argentina that is communist-oriented. The worst I can imagine is a Mitterrand situation: poor handling of the economy, a messy situation of trying to give everyone what everyone asks for.

"You know," Carles continues, with a sly smile, "I would be afraid if we did not have all that external debt. Because then there would be a margin for making mistakes without the threat of incurring immediate consequences that would be felt by large sectors of the country. What the International Monetary Fund has required of Argentina is not too strict. It is much more lenient than it was 20 years ago. It knows the country cannot bear a very severe recession and, therefore, it is likely to be flexible if we cannot meet the objectives." In this context Argentina's foreign debt can be seen as a needed brake on any excesses that "emotional" populist regimes might otherwise attempt.

Carles of Argentina
"In Argentina state participation in the economy is nearly 50%, according to our best estimates. We are a socialist country without knowing it."

"If Argentina had proper monetary and fiscal policies, everything else would be easy to solve," says newspaper editor Roberto Alemann, the widely admired minister of the economy under the military Galtieri regime just prior to the Falklands War. "Of course, you have to have a president who is prepared to endure all the screaming by vested interests. My approach was to reduce the deficit in the budget, control foreign exchange reserves and control money creation by the Central Bank. Only when you have control of the three sources of money creation can you think of building a stable economy. I brought inflation, as measured by the consumer price index, down from 12% a month in January to 3% a month in May. People learn very quickly to live with it. Of course, many debtors were furious with me. They wanted money from me, in the form of trade credits and subsidies, every hour of the day. The labor unions were against my program; so were the businessmen and the politicians. I knew that. I just didn't listen to them. I just said, 'No, my deficit is this, and I'm not going to change it.' If I had been allowed to stay in office without a war, I would have made it. Just by not giving in to the demands for fresh money. That's all. You should do the same thing in the U.S."

Easier said than done, of course, but say this for the debt crisis: It leaves little choice. Today's money markets have a way of vetoing unwise political policies. Ask François Mitterrand.

What now, South America? Somewhere between the unthinkable Scylla of repudiation and the Charybdis of redlining by the big international banks is the most likely outcome. That still leaves the big question of the restraints on South American governments' policies that all that foreign debt will inevitably impose—a question now being studied by a blue ribbon panel of U.S. business and government leaders sponsored by the Americas Society. Call it muddling through, but what's wrong with muddling through? Consider the alternatives.

What lessons were learned from the great petrodollar credit binge in South America? Brazil's minister of the economy, Ernane Galveas, puts it this way: "I think the one thing you might criticize in Brazilian strategy was that we were trying to do too many things at the same time without realizing that liquidity could change in the financial markets as it did. The capitalistic world is subject to these ups and downs, and you never know at what part of the cycle you find yourself. So if you invest too much at one point, you might find that you have to pay it back just when you are not prepared to do it, just when the market is not offering the same conditions for your exports."

Argentina's Federico Carles, perhaps out of wishful thinking, sees the crisis as a final negation of Peronist tenets: "What we have learned is that we cannot ignore the rest of the world, that we have to be integrated with countries that are able to give us advanced technology; that it is not possible to substitute for imports entirely; that if you want growth, then you have to import, and that importing means lines of credit, which means reasonable relations with foreign banks."

But leave the last word to I. Hersz Kahane of Rio's Emesa, because it still reflects the current beliefs of many South Americans: "With all the problems that Brazil has, if there is in this world a place where you can still come, settle, and if you bring a willingness to work . . . very few places have as much to offer as Brazil. When I first came here 30 years ago, I started out in the north of Brazil just picking up cashew nuts that were lying on the street and sold them in the marketplace. There are still a lot of cashew nuts, figuratively speaking, available in Brazil."

In the last resort, those figurative cashew nuts may prove the bankers' best collateral.

Some free advice

And what suggestions would these same South Americans have to give the Reagan Administration, based on their own painful experience over the past decade?

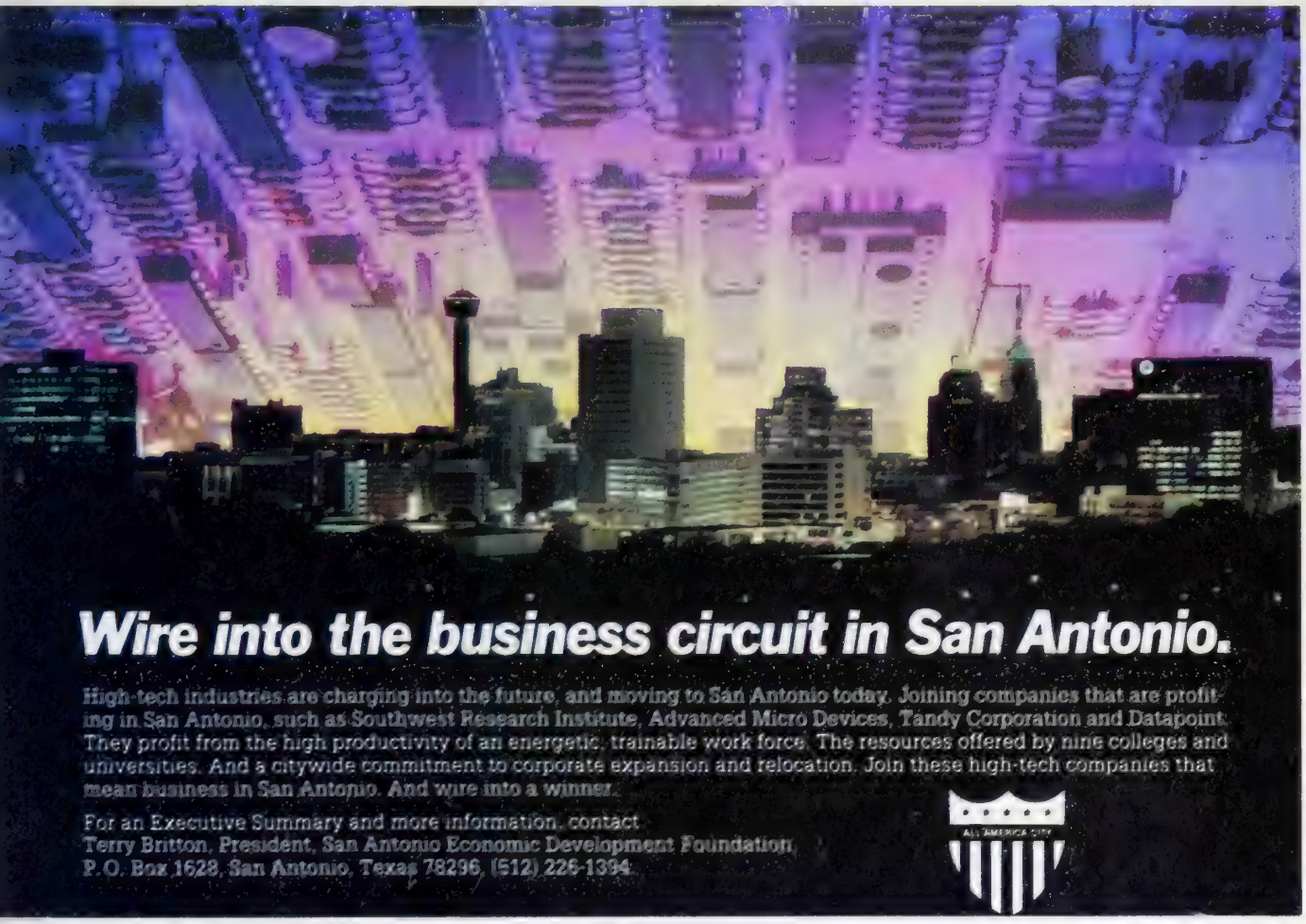
"If I could speak to President Reagan, I'd say to him that he should make more effort to reduce expenditures on welfare," says Brazil's Gouvea de Bulhões. "I would also urge more incentives through income tax, as he is inclined to do, but relating these incentives specifically to investment in corporations.

Alemann of Argentina

"I think the main cause of inflation in the U.S. is the expenditures on the welfare economy. That, too, is a massive transfer of income from the production sector of the economy to the consumption sector. And that is the reason productivity is declining in the U.S. But it is not easy to cut back the welfare economy. It could bring some political reaction, so you must be careful. It takes time.

"In terms of corporate incentives for investment, the problem in the U.S. is that, if you buy shares in a company, you face double taxation: first on profits and again on dividends. I would say that the dividends you receive from buying a corporation's new shares—not the old ones—ought to be exempt from corporate tax. Taxes on those dividends should only be paid by individuals. This permits the corporation to increase the dividends on its new shares and so attract new equity. After some investment is made by the corporation, the exemption might be extended to the old shares, too. If your President did that, I'm sure he'd recuperate the private sector of your economy in short order."

Argentina's Roberto Alemann would be equally stern on U.S. fiscal policy. "If I were your Secretary of the Treasury, I would reduce the deficit," he says. "I see in the U.S. a very substantial money-supply expansion through fiscal deficits. I don't see any correction of it. What Mr. Reagan really did was reduce income and increase expenditures. And therefore the deficit has never been as high as it is now in the U.S. And it's the Fed that's financing it. You'll have to adopt indexation if you keep it up. Cut back fiscal deficits, and you might have a small reduction in the standard of living for a while, but then there would be a significant increase. The dollar would be the strongest currency in the world. You'd have long-term money to invest. But instead you will go down the other road. You pump money into the economy. You get higher prices. Then you index, and you think you have corrected. But you have not."—**G.S.**



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Expand in adversity, the bromide goes. That's just what Arrow Electronics did. The payoff may come soon.

Phoenix

By Robert McGough

On Dec. 4, 1980 a fire at Stouffer's Inn in Harrison, N.Y. killed 26 people. Thirteen, among them Chairman B. Duke Glenn and Executive Vice President Roger Green, were executives of Arrow Electronics, a $404 million electronics parts distributor. The tragedy left Arrow with an unfinished growth plan and almost no time to prepare for the worst recession in the history of electronics. John Waddell, also an executive vice president, dealt with it all. It would have been understandable had Waddell chosen to retrench. He chose instead to hold course. In 1982 Arrow's overall sales grew by 14.8% and its electronics parts sales by 22%, against an industry average of only 6%. Arrow cracked the huge Los Angeles market. But there was hell to pay on the bottom line. Arrow lost $1.19 a share.

Waddell, 45, is an introspective man, a photograph collector, but his voice gets steely discussing 1982. "I decided to play guts ball and to stare this recession in the face," he says. That's a Waddell few had seen before. "A lot of people thought he was a lightweight," a trade reporter says.

Electronics may imply advanced technology, but electronics distribution, with a ten-year compounded annual growth rate of 14%, is far from that. Instead, it's a commodity business. Distributors try to buy cheap and sell dear as middlemen between 33,000 small industrial parts users and manufacturers such as Intel and Texas Instruments, who shun little orders. Yet the proliferation of small, technologically advanced manufacturers has given the distributors a bigger share of the market pie.

"It's an industry full of old peddlers, guys that started out with their own shop selling electrical products," says William Pade, a McKinsey & Co. consultant. It's also an industry, like commodities speculation itself, in which you can fritter away a lot of money to gain a winning position, and Arrow's strategy has been to gain that position. The fastest-growing distributor in the past ten years, Arrow has become the biggest in the business, next to $1.1 billion Avnet, Inc. "We've been growth-oriented at the expense of most other considerations," Waddell says.

Arrow Electronics Chairman and President John Waddell
"I decided to play guts ball."

But it's hardly growth for growth's sake. Only the big boys, the argument goes, will share much of an imminent windfall in electronics parts profits. "Our theory was that the game of musical chairs would end," says Waddell. "I think we're seeing that now."

To expand and secure its growth, Arrow ran up a lot of debt in order to finance streamlined warehousing and inventory control and insure faster deliveries that help it win business from competitors. But the biggest competitive assault was on the Los Angeles market. Some of the competition gripes about Arrow's "brutal pricing." Translation: Arrow won business. Having expanded and impressed Wall Street, Waddell raised some $27 million in new equity capital, shrinking a burdensome debt-to-equity ratio by more than half, to 1.4-to-1, after paying off debt to save $3 million in yearly interest. Beautifying the balance sheet also regained Arrow the use of its entire $60 million line of bank credit for future needs.

Wall Street turned sweet on distributor stocks two years ago, touting them as unexploited plays on the electronics business, unlike manufacturers such as Motorola or TI. Conventional wisdom now, says analyst Harry Rosenthal of Bear, Stearns. But institutional sheep keep their heads turned toward leader Avnet ("The coward's way to buy the industry," says a New York money manager). Second-tier distributors such as Arrow may attract more attention soon as the bull market overvalues obvious picks in favored industries. But Arrow's leverage, shrunken as it is, worries some stock pickers. And a lead-refining subsidiary that had helped finance growth has lost ground lately. Waddell is aware of the skepticism. "Our strategic exercise for a decade has been to get position," he says. "It cost us a lot of time, money and aggravation." After the fire, he says, "the overwhelming reality in my life was that I had a job to do. Now it's time to turn our attention to cashing in on a ten-year investment." ■

A Forbes Special Advertising Supplement

Mergers And Divestitures:

The New Growth Strategy

By **Edward T. O'Toole**

The old-timer asks, "Why Mergers and Divestitures? What was wrong with Mergers and Acquisitions – or M and A, as we used to say?"

Get with it, old-timer. Maybe thirty, or twenty, or even ten years ago, Mergers and Acquisitions was okay. Then, the great majority of corporate combinations originated as gentlemanly agreements whereby two companies' total resources would be merged.

M and A was okay, then. Now? Almost 40% of the action this year is expected to originate as the planned selling of a division or subsidiary that hasn't met the parent company's profit expectations; or possibly it doesn't fit into new development plans.

Ergo, Mergers and Divestitures, or M/D.

Although the business of buying or selling corporate assets in whole or in part is widely regarded as a latter-day phenomenon, actually it's been a dynamic part of U.S. economic growth for well over a century. The pools and trusts that grew out of corporate combinations in the 19th century were outlawed later on. But they were the forerunners of the continuing consolidation of a large number of small companies into a small number of large companies. This was a common characteristic in the evolution of all our basic industries.

Wall Street's View of the Intermarket

"Intermarket" is a buzzword making the rounds these days among the major investment banks, the biggest M/D dealmakers. Intermarket refers to the simultaneous acquisition/divestiture activity that characterizes the latest evolutionary development in corporate growth.

All the big Wall Street firms provide a full range of M/D services, and they're all prepared to comment on all aspects of the intermarket. Here is a cross-section, arranged alphabetically, of their individual views on intermarket trends:

A.G. Becker (Barry Friedberg): "Corporate restructuring will continue to be a main theme of mergers and divestiture activity this year, as it's been in the past year or two. There will be increasing emphasis on corporate strategy, and we'll see much more of a commercial rationale for these transactions than ever before. Previously, there had been more of a financial orientation to these deals. Corporations, those in the U.S. and those abroad, are regarding themselves as competitors in the global marketplace. These internationally oriented companies are getting rid of things in their portfolio that don't make competitive sense and are acquiring assets that will make them more effective competitors."

Dean Witter Reynolds (John Hall/Roger Kahn): "We're an across-the-board firm in the M/D market, but one sector with a great potential for us, because of our nationwide branch system, is the private-seller area. Our 6,000 account executives have developed close relationships with many owners of privately held businesses. When they want to go public, they often consult with our registered reps on the best ways and means. We have a full staff of M/D experts at headquarters in New York, as well as corporate finance officers in our regional locations. We provide the complete package of services to take the private owners public."

E.F. Hutton (Pete Chiappetta): "The real estate sector will continue to come back very strong. This applies particularly to the REITs (real estate investment trusts). A lot of them are in excellent financial condition. Since the collapse of the market in 1974, they've sold off their marginal assets. Their cash flow is very sound, particularly with the rebound of the housing market and the overall improvement in the economy. We expect to be very active in this burgeoning part of the M/D market as in the other areas."

First Boston (Joe Perella): "The M/D market is a creature of the stock market in many ways. With the stock market so robust, we're seeing a swing to securities in financing many of these deals. Back in the Sixties, when the stock market was really booming, the use of stock as currency in a deal was so attractive that the reliance on cash was down to 20%. It may never get that low again, although it's going to be much lower than the 50% ratio of cash-to-securities in recent years, especially if the stock market continues to rise."

Goldman Sachs (Steve Friedman/Jeff Boisi): "We had a record year last year, although I understand other firms may have seen their merger business decline. Our business is generally equally divided on the buy side and sell side. There's been a significant increase in divestitures in the past year. Another major trend has been in the reduction of the giant oil company deals. There has been considerable activity, however, in less than mega-size oil company transactions. Other industries – for example, insurance and banking – have been very active, reflecting the increase in the financial-services area, generally."

The CEO Faces Risks

The life of a successful corporate CEO is much tougher than it would appear to be at first glance. Sure, the chief gets a lot of perks: the limo, the country club, the stock options, the fat expense account, the staff experts at beck and the outside consultants on call.

But a CEO of a publicly owned company also must be prepared to take the risks that go with the rewards. Whether it's General Electric, Sergeant Electric or Private Electric, a successful business organization today must have a flexible game plan for coping with accelerated change in a time of economic uncertainty and intensified competition.

Top management must continually update its answers to four relentless questions:

Where is our organization today?

Where do we want it to be tomorrow?

How will we move it from here to there?

How do we stay in the driver's seat during the trip?

There is no final set of answers to these questions, no enduring strategy for corporate growth. In the tough competitive business world, corporate decision-makers confront a chilling reality: "Success is never final, although failure can be fatal."

Why do some companies grow and prosper while others wither and die? The answer is very simple – and immensely complicated. Business organizations, above all else, are composed of human beings joined in a common effort. Business success – or failure – always will reflect human success or failure. The enduring challenge doesn't change: the imperative of reconciling the need for continuity with the need for change.

Sound M/D Strategy Required

To meet this challenge successfully, the corporate CEO must have a sound M/D strategy. He must resist the urge to acquire merely for

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Goldman Sachs

category, with 11 deals, which [illegible] Boston and Kidder Peabody tied for third with seven deals each. Lehman Bros. indicated it had initiated only one of the deals it advertised, while neither Morgan nor Salomon indicated they had initiated any of their deals.

A regional firm and a bank both missed the top 15 on total deals by only one deal. Alex. Brown & Sons and Bankers Trust both had eight deals, one less than Drexel Burnham Lambert, number 15 with nine. Other also rans were Dean Witter Reynolds with seven, and Keefe, Bruyette & Woods, Robinson Humphrey, American Express and **Financo**, all with six. Financo had the best ratio of initiated to total deals, initiating five of its six deals, and coming in at fifth place on the initiated ranking.

1982 M & A Activity Ranked by Number of Deals Advertised as Initiated in 1982

Rank	Firm	# of Deals
1	Warburg Pariba[illegible]	12
2	Goldman Sachs	[illegible]
3	First Boston	[illegible]
3	Kidder Peabody	5
5	Bankers Trust	5
5	Blyth Eastman Paine Webber	5
5	[illegible] Dillon & Jennette	5
5	Drexel Burnham Lambert	5
8	**Financo**	4
10	Dean Witter Reynolds	3
11	Merrill Lynch White Weld	3
11	Robinson Humphrey	
	American Express	

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Kidder Peabody (Marty Siegel/ Pete Goodson): "There will continue to be hostile transactions, particularly in the form of proxy fights. In the past five quarters, raiders have been successful in 75% of the unsolicited, unnegotiated deals. Right now, raiders are waiting to see what kind of shark repellent stockholders will be putting into corporate charters at annual meetings. In March alone, 50 companies announced proposed charter modifications. These included staggered boards of directors, fair-price provisions and majority-vote changes. Raiders may be concentrating their efforts on smaller capitalized companies where they can get a foothold with a lower investment of funds and where the shark repellent may not be so virulent."

Lehman Brothers (Dick Bingham): "Our business has been really rolling right along. We've done 43 transactions with a total dollar value of $8.7 billion during the past six months, compared with 29 transactions for $4.3 billion in the same period a year earlier. Divestitures have been a major source of this increased activity. Our clients have had the opportunity to monitor the operations of their divisions and subsidiaries over a full economic cycle in the past few years. In many cases, they are sharpening their corporate strategies by divesting operations in order to concentrate on the most promising growth areas."

L.F. Rothschild (Susan Lipton/ Katherine Watts): "Our firm is recognized as having special expertise in high technology, and our M/D business is more concentrated in this industry than in any other. The future will see a dramatic increase in M/D in high technology as more and more companies make hi-tech acquisitions to improve productivity. Others will want to add hi-tech dimensions to their businesses in order to expand into higher growth industries. We'll be doing an increasing number of these deals as well as continuing to work with firms like GE and Westinghouse in their M/D programs."

the sake of becoming bigger. He must keep his head when those about him seem to be losing theirs. This was often the case during the frenzied go-go years of the Sixties.

According to W. T. Grimm & Co., the Chicago-based chronicler of merger deals for more than 30 years, the record total of M/D transactions in any one year was set in 1969. The 6,107 total then compares with 2,346 in 1982. The average price/earnings ratio paid for acquisitions in the Swinging Sixties far exceeded anything since. In 1968, the ratio averaged 24.6x; currently, it's been running between 14x and 15x.

Of course the purchase price itself has been much higher in recent years. That ole debbil inflation has been one reason; the increasing size of the entities involved in the deals has been another. In the Sixties, despite the greater number of transactions, a big year in terms of the total dollar value of transactions was anything above $40 billion. The dollar-value record for all time, according to Grimm, was the $82.6 billion in 1981.

Last year, the aggregate figure was $53.8 billion, a decline of 35%, although the number of transactions was off only 2%. The sharp drop in the total dollar value of transactions in 1982 was due largely to the waning number of megadeals, i.e., those of $1 billion or more. The drop in the billion-dollar big hits in turn reflected the retreat of the giant oil companies to the sidelines.

It seemed cagey to invest in proved oil reserves when the price of a gallon of gas looked as though it would be pushing through $2.00 or more at the pump. And when the price of other petroleum products also seemed to have a permanent slot on the up escalator. At a time when exploring for new oil cost $12 a barrel, proved reserves at $7 per barrel looked like a great buy to the big producers.

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Mergers and Acquisitions

	1982	1981	1980
Number of Transactions			
Lehman Brothers Kuhn Loeb	**60**	**47**	**37**
Goldman Sachs	54	40	26
First Boston	38	30	12
Number of Transactions Over $100 Million			
Lehman Brothers Kuhn Loeb	**24**	**26**	**9**
Goldman Sachs	31	24	10
First Boston	19	22	5
Number of Divestitures			
Lehman Brothers Kuhn Loeb	**24**	**15**	**8**
Goldman Sachs	15	5	3
First Boston	9	3	2

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Leadership cannot be reduced to numbers alone. But statistics do make an important statement about a firm's performance and capabilities.

As the evidence here shows, Lehman Brothers Kuhn Loeb is a leader in Mergers and Acquisitions. A consistent leader. Not just for this year or last—but for three consecutive years.

These numbers are conservative. The figures of the authoritative publication, *Institutional Investor*, show Lehman Brothers' 1982 performance to be even stronger. And *Corporate Financing Week* (1/31/83) said "For the third year in a row, Lehman Brothers is first in our count of Merger and Acquisition tombstones placed in *The Wall Street Journal*..." In the past three years, Lehman Brothers completed 144 of these transactions—more than any other firm—for an average of nearly one a week, ranging from less than $10 million to over $4 billion.

By almost any set of numbers, the three firms represented here are the clear leaders. But leadership must be measured in more than just numbers. It must be measured in how an investment bank helps its clients achieve their objectives. In no area is this more true than corporate Divestitures.

Divestitures — Unquestioned Leadership

Lehman Brothers' leadership in Divestitures, by any measure, is unequalled. While we are proud of all our Divestiture transactions, and would be pleased to discuss any of those where we are authorized to do so, the following four of our more visible case studies underscore this leadership in no uncertain terms.

Burlington Northern

Burlington Northern decided to sell its highly successful air freight forwarding subsidiary because it did not fit BN's long term strategy. Confidentiality was critical, so Lehman Brothers identified and contacted a limited number of likely buyers. Despite this confidential process, we were able to create a competitive environment which resulted in a cash price of $177 million. This was almost six times its book value and exceeded the expectations of most industry observers.

Chrysler Corporation

Chrysler decided to divest its Chrysler Defense Division—which is the only manufacturer of tanks for the U.S. Army—in order to raise cash and to indicate to the financial and business communities that it was concentrating its resources in its automobile business. Lehman Brothers identified 25 qualified prospects and managed the sales process so that potential buyers were competing with each other for Chrysler Defense. This turned Chrysler into a "strong" seller, even given its weakened financial position at that time. Chrysler Defense was sold for $336 million. That figure was substantially above its book value. Chrysler now has a cash position of $1 billion.

CSX Corporation

CSX decided to sell its Florida Publishing subsidiary. Lehman Brothers used a divestiture tactic—a two-step, sealed-bid auction—never before used to sell a newspaper. Each major newspaper organization, in the U.S. and abroad, was contacted to participate. This procedure netted CSX one of the highest prices ever bid for a single newspaper.

International Harvester

International Harvester critically needed working capital. The Company retained Lehman Brothers to help it sell four separate businesses—The Solar Turbines International Division, IH's construction equipment business, The Association Life Insurance Company, Inc. and IH's 29% interest in Steiger Tractor, Inc. Employing a variety of divestiture techniques, we contacted a world-wide spectrum of potential buyers and ultimately sold these businesses to four different buyers. As a result, International Harvester raised over $600 million in cash—far more than IH management had expected.

The message is clear. In Divestitures—in all Merger and Acquisition areas—Lehman Brothers gets the tough ones done. A team of seven Managing Directors works exclusively in Mergers and Acquisitions. This group, in tandem with the firm's industry and international specialists, can show you what lies behind the numbers. Who really leads in Mergers, Acquisitions and Divestitures? Lehman Brothers.

Who gets the tough ones done?

More than likely it's Lehman Brothers

Lehman Brothers Kuhn Loeb
Incorporated

55 Water Street, New York, NY 10041 / (212) 558-1500

Harris Corporation

has sold its

Printing Equipment Sector

to

Harris Graphics Corporation

a newly formed company
organized by

Clayton & Dubilier, Inc.

The undersigned initiated the transaction, assisted in the negotiations and acted as financial advisor to Harris Corporation.

Kidder, Peabody & Co.
Incorporated

But that rationale assumed there would be continuing price increases in final products. The double whammy of a significant cut in the inflation rate, plus a huge increase in output from the North Sea, Alaska and other non-OPEC sources, have dulled the former brio of oil-related acquisitions.

Not that the oil burner has been completely turned off. But the pace and size of the deals certainly has diminished. In April, Jim Mahoney's weekly newsletter, "Corporate Acquisitions," reported:

> Now that the competitive hordes of acquirers have disappeared from the oil fields and acquisitions have been marked down, the bolder breed of acquirers are picking and choosing among oilfield opportunities.

Talk to the Wall Street dealmakers and you find they've been spending a lot of time helping their clients defend themselves against predatory raids as well as developing M/D strategy. They make clear to nervous CEOs that companies set themselves up as takeover targets when their stock sells significantly below book. And when the stock market is staggering around aimlessly, as it was before the current rally began last summer, you can bet unannounced and uninvited takeover moves will materialize, like hungry wolves around a crippled moose.

The investment bankers often help their clients mount and manage a two-pronged defensive strategy. One objective is sharpening and shaping the client's business in accordance with its current growth blueprint; the other objective is to help the client strengthen and maintain control of its business in an era when everything seems to be up for

RANKING MEGADEALS: 1981-82

Acquiring Company	Middleman	Acquired Company	Middleman	Year	Approximate Dollar Value (Millions)
DuPont	First Boston	**Conoco**	Morgan Stanley	1981	**$7,215**
U.S. Steel	Goldman Sachs	**Marathon Oil**	First Boston	1981	**6,618**
Connecticut General	Goldman Sachs, Lazard Frères	**INA Corp.**	Goldman Sachs; Lehman Brothers	1981	**4,218**
Occidental Petroleum	Donaldson Lufkin Jenrette; Goldman Sachs	**Cities Service**	First Boston, Lehman Brothers	1982	**4,202**
Norfolk & Western	Dillon Read	**Southern Railway**	Morgan Stanley	1982	**2,900**
Elf Aquitaine	Salomon Bros., Lazard Frères	**Texasgulf (65%)**	Morgan Stanley	1981	**2,742**
Seagram	Shearson Loeb Rhoades, Lazard Frères	**Conoco**	Morgan Stanley	1981	**2,552**
Kuwait Petroleum	Salomon Bros., Morgan Guaranty	**Santa Fe Intl.**	First Boston	1981	**2,501**
Fluor	Lehman Brothers	**St. Joe Minerals**	Smith Barney, First Boston	1981	**2,343**
Standard Oil (Ohio)	Goldman Sachs	**Kennecott**	Morgan Stanley	1981	**1,768**
Dome Petroleum	Shearson Loeb Rhoades	**Hudson's Bay**	Morgan Stanley	1981	**1,675**
R. J. Reynolds	Dillon Read	**Heublein**	Goldman Sachs	1982	**1,621**
American General	First Boston	**NLT Corp.**	Morgan Stanley	1982	**1,500**
Dome Petroleum	Shearson Loeb Rhoades	**Conoco**	Morgan Stanley	1981	**1,430**
Baldwin-United	Merrill Lynch, MacDonald & Co.	**MGIC Investment**	Goldman Sachs	1981	**1,200**
Bendix Corp.	Salomon Bros., First Boston	**Martin Marietta (70%)**	Kidder Peabody	1982	**1,194**
Allied Corp. (From Bendix)	Lehman Brothers	**Martin Marietta (70%)**	Kidder Peabody	1982	**1,194**
SmithKline	Merrill Lynch	**Beckman Instruments**	Blyth Eastman	1981	**1,020**

grabs.

The toughest decision usually is determining which assets should be sold. Some corporate decision-makers regard it as similar to deciding which child should be tossed off the back of the sled. Making acquisition, consolidation or joint venture decisions is easier. But it's also riskier, since frequently it involves heading into unfamiliar territory.

One of the most difficult elements in overall M/D strategy is timing. The CEO burdened with a lagging p/e because of unprofitable or unsuitable assets can't sell too much too soon. If he doesn't buy something else at pretty much the same time, he'll accumulate too much cash and the wolves will begin circling the camp fire.

Ideally, then, a sound M/D program functions optimally when buy-side and sell-side plans are closely synchronized and implemented. For the CEO to attempt this on his own, it would be no more difficult than running in opposite directions at the same time. And that's one reason why Wall Street probably earns every dollar it gets from Main Street – and we're talking big bucks here, pardner – in M/D fees.

Merrill Lynch (Ken Miller): "The leveraged buyout market is now huge and growing. It reached $4 billion in 1982 and is increasing at about 20% per year. Our 1982 Signode deal was the largest LBO financing ever. We believe Merrill Lynch is the only firm which has, in-house, all elements necessary to complete a successful LBO. Our M & A department screens, structures and negotiates the deals; Merrill Lynch Interfunding buys senior and subordinated debt with equity attached; Merrill Lynch Venture Capital buys pure common stock. As more financial institutions, domestic and foreign, become comfortable with this kind of financing, I predict we'll see LBO transactions so large as to dwarf even Signode."

Morgan Stanley (Joe Fogg): "We expect M/D activity to be high in 1983, although not as high as the record-breaking year of 1981. Our database shows 63 transactions in excess of $35 billion have been announced in the first quarter of 1983, with 55 deals completed with an aggregate dollar volume of $13.6 billion. On the international scene, M/D activity – adversely affected by the economic environment and by the persistently strong U.S. dollar last year – should pick up in the year ahead. We believe that improving economic conditions overseas and the continuing attractiveness of investment in the U.S. will result in renewed interest in cross-border acquisitions."

Working up defense strategies with clients has been a really neat growth industry for investment bankers in recent years. Besides being an effective revenue-producing tool, defense planning also has created such colorful idiom as:

Shark Repellent: The various

Management of Consolidated Cigar Company has formed a new corporation to purchase substantially all the assets and business of

Consolidated Cigar Company

from

Gulf+Western Industries, Inc.

The undersigned assisted in the negotiation of the purchase, arranged the financing and participated as an equity investor in this leveraged buyout transaction.

DEAN WITTER REYNOLDS INC.

April 1983

It's unusual to discuss the far-flung M/D business with any dealmaker without "LBO" entering the conversation early on. LBO is investment shorthand and financial quick-speak for leveraged buyout, one of the hottest developments to come down the M/D pike in years. Essentially, an LBO is an acquisition of corporate assets that is paid for through the cash flow generated by the assets acquired.

The most attractive feature of an LBO is its high leverage. The debt-to-equity ratio of the funds raised to purchase the assets can run as high as ten-to-one, although a lower ratio is more the order of the day. This enables the management of the new operation, as well as the other equity investors, to enjoy a huge capital appreciation in the value of their shares once the debt has been paid down.

A typical LBO has four financing components: a bank borrowing, often in the form of a commercial-bank term loan; subordinated debt, which usually takes the form of subordinated debentures; preferred stock, often the cumulative variety; and common stock, wherein the management usually gets its piece of the action.

The dealmakers who put together an LBO use four criteria — at least four — in assessing the viability of the new operation. First is the nature of the business: fledgling companies are out; seasoned manufacturing companies are ideal. Second is the quality of management: brash young geniuses don't rate at all whereas veteran managements with a proved track record get top priority. Third, there must be a demonstrable cash flow adequate to pay down the debt costs of the financing. Fourth, there must be reasonable assurance that the quality of management and level of cash flow will continue after the assets are transferred. This means, essentially, that top management will transfer to the new company and run it.

LBOs have become attractive instruments for corporations intent on spinning off divisions or subsidiaries no longer regarded as key elements in future growth plans. They also have proved to be very effective methods of public companies taking themselves private and thus forefending the risk of being taken over by a black knight.

Of course, this doesn't mean that an LBO is *guaranteed* to succeed after the deal is completed. After all, although the LBO is a relatively new form of investment, it still is an *investment*.

And risk/reward is still the name of the investment game in all its aspects. Although most LBOs may be winners, some will be losers. And on that, you *can* rely, as time goes by.

A majority of the outstanding Common Stock of

Gallery of Homes, Inc.

was acquired by

Frank Scott Enterprises, Inc

Prudential-Bache Securities

COMTECH

has acquired

PMC

Premier Microwave Corporation

Prudential-Bache Securities

AZON CORPORATION

has acquired

Printec Corporation

Prudential-Bache Securities

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ploys devised to discourage predators in advance of an attack. A favorite gambit of late has been changing the by-laws so that a forbidding majority of stockholders (80-90% is not uncommon) must approve any hostile tender offer or other takeover bid that surfaces.

Golden Parachute: The huge payout top management is assured should a hostile takeover attempt be successful, and many of them are. One problem a board of directors faces is not to make the parachute too golden, which could weaken management's will to win when a hostile takeover materializes.

Killer Bees: Hiring top ancillary firms on a retainer basis—a law firm, proxy solicitor, and public relations agency prepared to pitch in with the investment bank when the fire-alarm goes off. Also recommended: having a strong line of credit or assured availability of a war chest at your friendly commercial bank. And equally important: letting the word get around that these killer bees are in the hive, ready to do their terrible things if need be.

Pac-Man: Making a tender offer, equally hostile, for the stock of the acquirer who is attempting to acquire the client's. Some of the Great Defenders call this "Reverse Pac-Man" to distinguish it from the hostile acquirer's initial move.

Radar Alert: Monitoring closely the market action of the client's stock to determine if someone isn't buying it in quantity in advance of a predatory move – and, of course, calling up the CEO on the red phone when this seems to be happening.

Scorched Earth: The en masse departure of top management that will result from a successful hostile takeover – a policy promulgated as

Prudential-Bache (Bob Willard): "There have been two dramatic changes with major impact on the M/D market. First, the cost of capital for buying businesses has gone down very significantly over the past year. Second, there has been a change in the attitude of the corporate decision-makers. With the improving economy and reduction of inflation, they've become more optimistic. They don't have to spend so much time on cost-cutting and bolstering their earnings. They are turning to what they find more exciting: corporate restructuring and diversification. This portends more buying and selling of corporate assets."

Salomon Brothers (Jay Higgins): "Merger activity has paused recently, partly because of the phenomenal rise in the stock market. Although this slowdown is likely to be temporary, different types of transactions may become dominant when deal activity accelerates. Unlike the 1979-81 period when large energy deals were much in the news, the large increase in merger activity in the future is likely to be in the banking and financial services industries. For example, Salomon Brothers recently played a role in two transactions of this type – Bank of America's acquisition of Charles Schwab & Company, the country's leading discount brokerage firm, and Xerox's $1.6 billion acquisition of Crum & Forster."

HEALTH & TENNIS CORPORATION OF AMERICA

has been acquired by

Bally

Manufacturing Corporation

The undersigned initiated this transaction, assisted in the negotiations leading to its conclusion and acted as financial advisor to Health and Tennis Corporation of America.

L. F. ROTHSCHILD, UNTERBERG, TOWBIN

April 6, 1983

Sandoz United States, Inc.

a wholly owned subsidiary of

Sandoz Ltd.

has acquired

Zoecon Corporation

from

Occidental Petroleum Corporation

The undersigned acted as financial advisor to Sandoz.

The First Boston Corporation

April 5, 1983

Academy Insurance Group, Inc.

has sold an equity interest of
20.2% of its common stock to

Aachen and Munich Holding Company

The undersigned initiated this transaction and acted as financial advisor to Academy Insurance Group, Inc.

The First Boston Corporation

April 14, 1983

the assured consequence of a raid before an unfriendly offer is made.

Nuclear War: Such quadrilateral imbroglios as involved DuPont, Conoco, Mobil and Seagrams; and more recently, Bendix, Marietta, United Tech and Allied.

Black Knight: Any practitioner of a hostile takeover attack, in part or in whole, on someone else's corporate assets. The opposite, of course, is the white knight, the saviour into whose arms the besieged client flees.

Small Firms Participate

While the largest Wall Street investment banks do handle the greatest dollar value of transactions, numerically it's a different story. Over 85% of the total transactions each year involves deals under $100 million. Most of these are handled by smaller firms with capital of less than $100 million.

One of the pacesetters in this group is Carl Marks, which puts special focus on leveraged buyouts and related activities, including venture capital investments. Over the past decade, the firm has been involved in the investment of over $500 million in 150 venture deals and 30 leveraged buyouts. Carl Marks also can handle the blockbusters, the deals of $100 million or more. Recently, it concluded a $120 million transaction whereby CM Capital Corporation acquired Williamhouse-Regency.

Financo, based in Philadelphia, is one of the most active independents whose sole focus is on corporate combinations and divestitures. The firm specializes in such industries as retailing, apparel, health care and high technology. Since the company was formed ten years ago, it's concentrated on deals in the $5 to $75 million range, completing 100 such transactions with a total dollar value of more than $1 billion.

The smaller firms that concentrate on the smaller deals don't have this field to themselves. There are hundreds of one-man and two-man merger-brokers beating the same bushes.

What's more, the heavyweights have become much more aggressive in pursuing this business. The big guys like Lehman Brothers, Goldman Sachs, First Boston and Merrill Lynch have been putting increased emphasis on *all* sectors of the M/D market, the smaller deals included. And while most of the big commercial banks (Citibank, Bankers Trust, and Morgan Guaranty are exceptions) have been on the sidelines, they're now gearing up to enter the highly competitive M/D market in the near future.

Dillingham Corporation

has become a privately owned company
through a merger with a newly formed corporation
owned by

Kohlberg, Kravis, Roberts & Co.

and other investors, including management members
of Dillingham Corporation.

We served as financial adviser to Dillingham Corporation and assisted in the negotiations.

A.G.BECKER PARIBAS
INCORPORATED

March 1983

Edward T. O'Toole

"Money certainly is an exciting subject. There's no reason why the written word about it should be dull."

As a financial writer, editor and communications consultant for more than 25 years, Ed O'Toole is uniquely qualified to author these Forbes Special Advertising Supplements. His insider knowledge of the financial industry and lively, plain-language writing style provides added dimension to the editorial portion of Forbes Special Supplements.

In the Sixties, Mr O'Toole covered the money market, stock market and international financial markets as a reporter and foreign correspondent for The New York Times. In the Seventies, he wrote extensively on consumer finance as a columnist syndicated by the Washington Post, and as a frequent contributor to major business publications. In the Eighties, Edward T. O'Toole Associates provides communications counseling to financial services organizations. His books include: "The New World of Banking," "How To Gain Financial Independence," and "Opportunities in The Securities Industry."

Philadelphia National Corporation

the parent of

Philadelphia National Bank

and

National Central Financial Corporation

the parent of

Hamilton Bank

have combined to form

CoreStates Financial Corp

We acted as financial advisor to Philadelphia National Corporation in this transaction and assisted in the negotiations.

Merrill Lynch White Weld Capital Markets Group

Merrill Lynch, Pierce, Fenner & Smith Incorporated

May 3, 1983

If you think the accounting rules are complicated, wait until you see the rules for changes in the rules.

Add a dash of cumulative catch-up

By Laura Rohmann

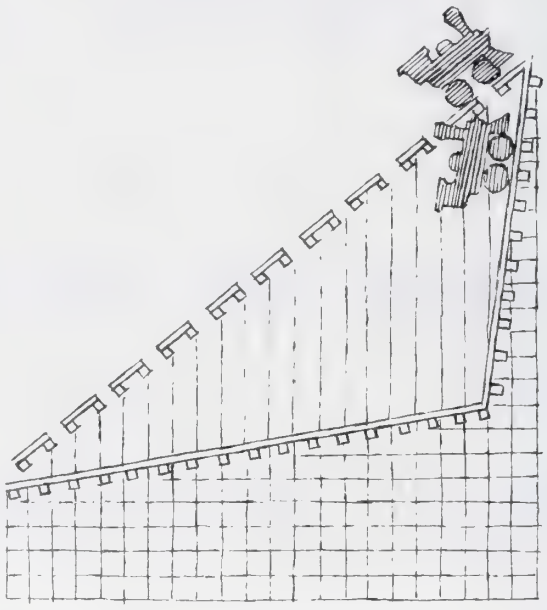
NOBODY EVER SAID that understanding corporate financial reports was easy. But when a company changes its accounting practices from one year to the next, all but the most diligent readers of annual reports can get lost.

The question for companies seems simple: to restate prior years' income statements or not to restate? That issue has been a long-simmering point of dispute among accountants, and a change in the way railroads account for track maintenance has restoked the fire. Last February the Interstate Commerce Commission decided that carriers could no longer expense track maintenance costs in their reports to the ICC. Instead, these costs should be depreciated over something like 30 years. Result: lower annual maintenance charges and higher reported earnings.

Naturally, that news has drawn huzzahs from the railroads, especially since most companies will now use the same technique on their public statements. Analysts estimate that this will add between 20% and 30% to the profits of many lines next year (FORBES, *Sept. 1, 1980* and *July 20, 1981*).

But if this huge increase in earnings pops up in 1983, won't that confuse readers of railroad annual reports? Investors looking quickly at the statements could be misled into thinking that all the good numbers stem from an industrywide boom. The obvious solution is to have railroads restate prior years' earnings using the new accounting method. Obvious, but ordinarily not allowed.

According to a rule enacted by the FASB's predecessor, the Accounting Principles Board, companies cannot restate earnings because of a voluntary accounting change. And everything is voluntary unless decreed by the FASB.



Now the FASB wants to create an exemption for the railroads—letting them change earlier results to conform with the more generous depreciation policy. That makes tons of sense. The problem, however, is that the rule against restatement is already riddled with exceptions. Such common things as switching from LIFO inventory valuation to another method, changes in accounting for long-term contracts and certain changes in the way companies show oil and gas drilling costs are exempt.

Some accountants, in fact, think too many exceptions spoil the rule. "The FASB is waffling again on how you make a change," says Joseph Connor, Price Waterhouse chairman and senior partner. "It seems to me that when you have as many exceptions as there are here, then maybe you had better take a look at which is the rule and which is the exception."

What's the defense for not allowing all companies to restate? "The APB was afraid that restating would destroy public confidence in financial reporting," says Steven Johnson, FASB manager of the railroad project.

There's clearly some logic to that. If companies were forever changing their earnings retroactively, investors would quickly lose whatever faith they once had in financial reports. On the other hand, isn't it the job of the FASB and SEC to make sure that companies don't make frivolous accounting changes in the first place?

The importance of the issue becomes even clearer when you see the alternative to restating earnings. It's not what you think. Companies that don't restate can't simply make a change on this year's income statements. Instead, they are forced to employ something called cumulative catch-up accounting. Here, a company calculates how much a new accounting method would have altered earnings for however many years the change was applicable. It then adds the cumulative change, all at once, into the current year's earnings.

Think about this. It is the worst of all worlds. Not only is the current year incompatible with past years, the change rips the current year's figures away from any link with reality.

Why such a ridiculous method? "I think some members of the APB felt the catch-up method would be punitive and would reduce the number of capricious accounting changes," says Price Waterhouse partner Raymond Lauver. But who was being punished here—the companies or their shareholders?

Of course, you can hardly blame the FASB for a rule that was implemented years before its time. But now that the board clearly sees the problems and has planned changes for railroads, why not stay on the track? ■

UNLIKE MOST PERSONAL COMPUTERS, THE OLIVETTI M20 HASN'T FORGOTTEN THAT THE MIND HAS A BODY.

The Olivetti M20 personal computer is designed to meet the most demanding needs of your business. It's also intelligently designed to meet the needs of your body, as well.

Begin with the problem of eyestrain. The M20 offers extraordinarily high-resolution screens, both in color and black and white. Not only are the graphics more exacting, but the characters in word processing are more sharply defined.

The display screen can be tilted, swiveled or even removed and placed nearby. So the M20 accommodates itself to your height, posture and work habits.

Even the keyboard is ergonomically designed to have the optimum slant. And it's in the same configuration as your typewriter, so you need not readjust to it.

Or consider the simple matter of time. Waiting for a program to run can be vexing. So Olivetti designed the M20 to be a true 16-bit computer.

What's more, the M20's single-key programming feature can shorten the task of writing software by hours.

But of all the senses the M20 appeals to, it appeals most strongly to your business sense. To begin with, it offers the flexibility you need in today's fast-changing business world.

It has 128K RAM, enough for most tasks. However, it can be easily expanded to 512K RAM. And, while it comes with a 320K floppy disk drive, an 11Mb hard disk is also available.

What's more, the M20 is flexible enough to run 8-bit software. So the choice of operating systems and storage is yours.

Equally important, the M20 is designed to be expandable in many ways. It can be linked to other Olivetti products. Like the revolutionary new PR2300 ink-jet matrix printer, which gives you ink-jet quiet and speed for the price of a matrix printer.

Or, for letter-quality word processing, link it with Olivetti's Praxis 41D portable electronic typewriter.

Yet, with all these exceptional features, the Olivetti M20 is priced in the same range as more ordinary personal computers.

Discover the computer that's intelligently designed to appeal to all your senses. Including your business sense. The M20 from Olivetti.

See your participating dealer for details on the M20 Challenge Sweepstakes

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THE INTELLIGENT CHOICE. BY DESIGN.

Why is Dreyfus Fund's management buying a bank? Because it wants to be a lender as well as a borrower.

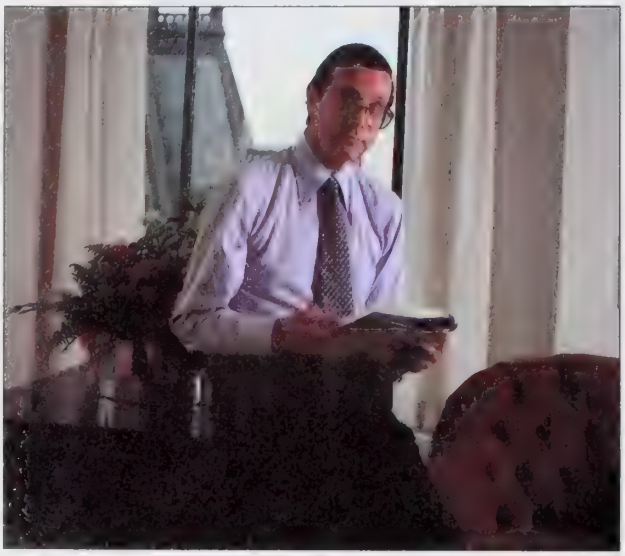
Power to the people

By Richard L. Stern

DREYFUS CHAIRMAN Howard Stein was looking mighty relaxed last month for a man whose giant mutual fund company (over $20 billion under management) had just seen something like $1.9 billion in money fund assets evaporate—the bulk undoubtedly going into bank money market accounts. Relaxed? He was not even wearing shoes as he went about business in his office on the 35th floor of the General Motors Building in New York City. In a few days he would announce that Dreyfus had earned $1.80 a share for 1983's first quarter, only 7 cents below the fourth quarter of 1982. Considering those billions in outflow, that's "incredibly good," says A. Michael Lipper, whose service tracks fund records. It seems Dreyfus at the same time had taken something like $1 billion into its nontaxable bond funds and its stock funds—where Dreyfus gets higher management fees.

No, it is the bankers out there, not Stein, who should be looking worried. Stein, a serious violinist as a child, has composed a plan to steer Dreyfus into the consumer loan business. And the result could be as upsetting to the banking system as the money funds were. The funds changed saver habits because they were able to offer higher interest rates. Stein is hoping he can grab a lot of consumer loan business by offering cheaper loans.

How? Last January he bought a small bank in New Jersey and renamed it The Dreyfus Consumer Bank. Stein has begun accepting home mortgage and auto loan applications by mail from the bank's customers and Dreyfus Fund's shareholders. The Dreyfus mortgage program is expanding from New Jersey into five other states—New York, Pennsylvania, Connecticut, Florida and Massachusetts—and then, if all works well, nationally. There are similar plans for the auto loans, and Stein also is about to test, in California, a mail-order line of credit collateralized by second mortgages. Stein won't say what other kinds of loans he has in mind, but obviously this could be only the beginning. "We have," he says, "all sorts of dreams."



Dreyfus Chairman Howard Stein
"Dreams" that should worry the banks.

Stein claims his trump card over the banks is his much lower overhead. Not saddled with the brick-and-mortar overhead of branch banking, Stein claims, the cost to Dreyfus of attracting and serving mutual funds is approximately 50 basis points, compared with a cost of 300 basis points for many banks.

Stein claims Dreyfus is passing the savings on to borrowers. On regular auto loans, for instance, Dreyfus was charging 12.9%, compared with 14.5% at many banks. On special incentive deals from automakers—9.9% for a specific model, for instance—Dreyfus charges 9%. The reason: It returns to the consumer some of the special rebate given to the banks by the automakers.

While Dreyfus' 30-year fixed mortgage rates remain consistent with Fannie Mae market rates, its savings come in the form of fewer points and lower application fees. In New Jersey, for instance, most banks charge 300 to 500 basis points these days, says Stein. That's $3,000 to $5,000 on a $100,000 mortgage. Dreyfus' charge: 175 basis points, or $1,750. Similarly, says Stein, his upfront costs for second mortgages will run about half of what banks charge in California.

Stein claims Dreyfus will be able to continue offering lower rates even when consumer loan rates drop. One reason, of course, is that he is in a position to skim the market—taking the best loans and leaving the more marginal ones to the banks.

Stein is mum on where he's going to get all this money to loan out. But the answers also are obvious. Mortgages can be packaged and resold to investors. There's also the commercial paper market for funds for consumer loans. Moreover, Lipper, head of Lipper Analytical Services, notes that Dreyfus, with its 1.3 million shareholders, has a huge "gathering system" that also can be turned into a "distribution system." Dreyfus' own bank can market to Dreyfus shareholders almost anything that any bank can package. Dreyfus competitor IDS, for instance, sells its investors certificates that are backed by mortgages. Why not package auto and other types of loans for Dreyfus investors?

Stein believes that an increasing number of banks will be turning from the consumer to wholesaling, or at least away from branch banking. Dreyfus hopes to take their place. Soon Dreyfus shareholders will be assigned personal representatives to call on an 800 number system. Whether consumers will prefer a dis-

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embodied voice to a bored face remains to be seen.

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In wanting to expand into financial services Dreyfus is far from alone. Undoubtedly, once Washington clears up the recently raised issue of who can buy banks, other fund management companies and brokerage firms will be following Stein's lead.

Consumer banking is, increasingly, a marketing game, and outfits like Dreyfus are old hands at marketing, a field where many banks are clumsy and inexperienced. ■

Management can make a swan out of the most awkward duckling, even a Sixties-style conglomerate like Conroy.

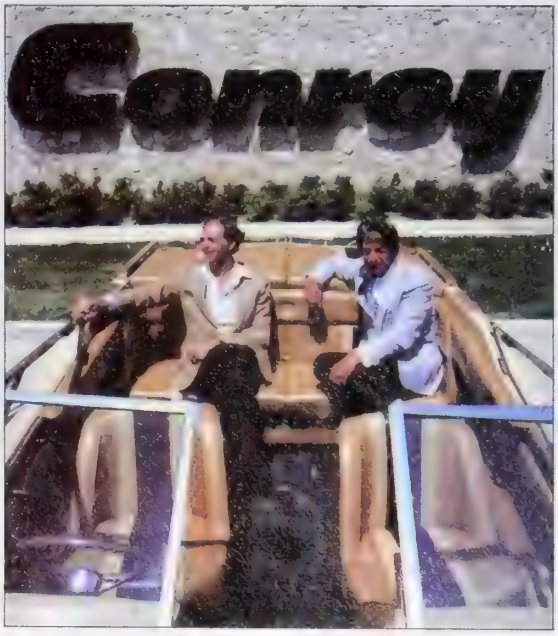
Not what you buy, but whom

By Anne Bagamery

Conroy Inc. of San Antonio, Tex. is one of those products of the Sixties, like black-light posters and Nehru jackets, that probably should never have made it into the Seventies. Thrown together in 1966 by a couple of San Antonio oilmen who had $10 million and a case of acquisition fever, Conroy (Consolidated Royalty) was, by 1970, a $50 million company, with seven divisions in the U.S. and Canada producing fiberglass pleasure boats, houseboats, motor homes, snowmobiles, high-priced knitwear and assemble-them-yourself TV tables and stereo cabinets. It was also near bankruptcy, saved only by President Keith Orme's persuasiveness with nervous bankers.

Today Conroy is a healthy company: In the fiscal year ended last August, it earned $6.4 million, or $1.55 a share, on $80 million in sales. First-quarter 1983 earnings were up an astounding 61%, with sales essentially flat. Last year return on equity was 15.5%. Debt is now down to 9% of total capital.

How did Orme do it? It was more than luck. Orme, a Harvard M.B.A., had been recruited in 1968 from the chief operating officer's job at Amalgamated Sugar by Hugh Halff Jr., Conroy founder and chairman. But Orme knew the conglomerate game was over; he wanted to buy companies that would pull their own weight. In 1969, just before Conroy's finances collapsed, he paid $8.2 million in stock for Lamar, Mo.-based O'Sullivan Industries, maker of TV tables. O'Sullivan was doing only $6 million in sales, earning $346,000. Moreover, the acquisition promised to be a cash drain for Conroy. Founder Tom O'Sullivan was selling out because his small company couldn't afford the capital spending needed to add capacity and keep manufacturing costs low—a necessity when your product retails at roughly $10. But the acquisition has proved golden.



Conroy's Keith Orme and Hugh Halff
A course correction to ride the tide.

O'Sullivan, who founded the company in 1952, had guessed correctly that television's growth would create a need for someplace nice yet inexpensive to put the set. Latter-day booms in stereo equipment and video games and recorders have fueled the fire. Result: O'Sullivan's sales have quadrupled in ten years, to $57 million, and its operating margin has grown to a robust 21%. In fiscal 1982 O'Sullivan turned in $6.7 million after taxes—105% of Conroy's net income.

"We could never have grown to the company we are today without Conroy's help and money," says O'Sullivan, although acknowledging he had doubts when Conroy stock fell to 81 cents in 1974. He recognizes the debt: "Now, I guess it's our turn to supply the capital Conroy needs."

Orme, who liquidated the mobile homes and sold the knitwear, houseboats and snowmobiles—the latter to Kawasaki in a deal he likens to Pearl Harbor in reverse—kept the pleasure boats along with O'Sullivan. Conroy's brands are the Glastron, a runabout, and the high-powered Glastron-Carlson "muscle boats." Boats helped the TV tables through most of the last decade, but since the 1979 oil price rise, they have been moneylosers. Now development capital from the TV tables is helping Orme bring out a smaller, lighter version of the $12,500 Glastron. It will have a lower-horsepower motor and an $8,300 price tag. Orders from this winter's boat shows were encouraging.

The stock market is impressed. Conroy recently was selling on the American Exchange at 29⅞, 14 times earnings and well above the $16 per share that Orme paid O'Sullivan in 1969. Halff, still a major shareholder, now has a small solid company instead of the conglomerate he started out for. Proving only that the best thing he and the others bought with their royalty money was good management. ■

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Through Sears, Al Essman makes pretty pictures and prettier balance sheets. If Sears could match his performance, its stock would sell for $528 a share.

Profits from portraits

By John A. Byrne

Memo to Edward Telling, Chairman, Sears, Roebuck & Co.:

Dear Ed: As you well know, the past five years have been tough. Per-share earnings have grown a scrawny 1.9% a year. Our return on equity has run only 9% a year. But I call your attention to one of our concessioners whose profitability is more than ten times greater than our own. Our company has a contractual right to throw him out of our stores on 60 days' notice. Shall we do it and take all his business ourselves?

The memo is fictional, but the facts in it are real. Yet Alyn Essman, operator of 628 photography studios in Sears stores, loses no sleep worrying about his relationship with the giant retailer. For one thing, Essman's CPI Corp., of which he is chairman, has dealt with Sears for 20 years, and, as a Sears official says, "A 20-year relationship speaks for itself. It has been a very satisfactory relationship."

By any measure of business success other than sheer size, CPI puts Sears to shame. CPI's financials are far better than merely pretty; they're downright glossy. From 1979 to 1982 earnings rose from 8 cents to $1.11 a share on a growth in sales from $56.4 million to $129.5 million. With no debt leverage at all, CPI has managed a three-year return on equity averaging more than 100% a year. Had Sears performed as well, its stock, at a price/earnings multiple of 15, would sell at $528 a share instead of $40.

Sears does profit nicely from its arrangement with CPI. "Right now they're getting $18 million out of our bottom line, plus $15 million in advertising," Essman says. "What's our share? After taxes, it was about $8 million last year. They get a much better deal than we do."

Thanks to Sears, CPI has come a long way from the days in which its

Alyn Essman, chief executive of CPI
"We found out that we're really not photographers."

peripatetic photographers crisscrossed the country pressing their services on customers. "It was a tough business," recalls Essman, 51, an accountant who joined the company as controller in 1956. "We'd hire a young guy, put him in a car with a camera and ship him out. A year later he might get home." Even then the company was selling portraiture through local managers of Sears and other stores, but the business was easy to enter and competition from local photographers made it increasingly difficult to skim the cream off the top.

Meanwhile, Milford Bohm, who had founded the family-owned business as Rembrandt Studios in 1942, sold out to Chromalloy American Corp. in 1968. Renamed CPI (Chromalloy Photographic Industries), Bohm's company looked to its parent to finance expansion through a chain of permanent studios. Four years later, Essman made a critical decision: to attach CPI to Sears in order to develop a national image and exploit national advertising. The two executives said good-bye to Montgomery Ward and others and went to work mainly through Sears.

In return for roughly 300 square feet of space in each Sears store, CPI agreed to give Sears 15% of its gross sales. The deal appealed to Sears' managers because it offered much higher sales per square foot than, say, washing machines or lawn mowers. Sears portrait studios chalk up an average $450 per square foot, far better than the retailer's overall $291-per-square-foot average.

The time came, however, when Essman found that Sears was easier to deal with than CPI's own parent, Chromalloy American. By 1979 CPI had expanded into about 400 Sears stores and had gradually eased out of traveling photography. But Chromalloy began to question further expansion. "Every year it was, 'Should we do this?' " says Essman. "And every year we sat down across the conference table and fought it out."

Essman, who had succeeded Bohm as chairman and chief executive of CPI in 1973, broke with Chromalloy. He and ten other CPI executives pooled $1 million in cash and issued $6 million in preferred stock to buy CPI at book value in 1979. It turned out to be a steal. The market value of CPI, which went public last July, has increased to over $200 million.

In 1979 Essman also radically changed CPI's marketing tactics, and that worked to enrich the business. Before, CPI had enticed bargain-hunting parents and other customers with a 99-cent loss-leader photograph and, later, sold customers hard on buying additional (and profitable) prints. But half the customers resisted and left with the bargain alone. CPI was only modestly profitable at an average customer sale of $14. That changed when Essman discovered he could get people to pay $8.95 to $14.95 for a standardized package of photos, although the average sale today is $22. Eliminating one-shot bargain hunters lowered costs by 60% and helped CPI sell 30% more photography.

In the process, CPI learned something it should have known all along. "We found out that we're really not photographers," says Essman. "At one time we thought we were, so we experimented with the wedding business, the school photography business, the home-portrait business and the Santa Claus business. We were moderately successful in some, not successful at all in others. We learned, though, that we're really marketing people who have designed a simple, efficient process to sell a product."

And a process that's transferable, Sears and Essman have figured, to other products and services. On Sears' advice, CPI has moved into the residential carpet and upholstery cleaning business through Sears in 23 midwestern and western states. So far, however, the business has been far less profitable than photography.

Meanwhile, Essman is expanding fast in photo-finishing, a business with annual sales of $2.3 billion. CPI has opened 12 minilabs, 10 of them offering one-hour service, in shopping centers in five states, and plans to open 25 to 30 more outlets this year. Over the next three to five years, CPI may invest as much as $14 million, which it has in cash, in photo-finishing. But it's a riskier business than portraiture. Two major photo-finishers have fallen on hard times and removed themselves from the business. Still, Essman thinks CPI's expertise and high-traffic mall locations give it an edge.

In more modest fashion, CPI is testing the marketing of office telephone systems for small businesses in St. Louis and Chicago through a tiny firm it acquired two years ago in St. Louis.

Such diversification seems imperative. Essman needs at least one solid new winner if CPI is to keep growing after saturation of the photo-portrait market. CPI already has 628 studios in Sears stores in 40 states, 67 in Simpsons-Sears department stores in Canada and 41 in U.S. shopping malls. At best, Essman figures he will open 31 studios this year, far fewer than the 114 opened in 1980, the 60 opened in 1981 and the 36 last year. But, he figures, there's room for growth in existing studios. More than 200 of them will begin to break even only this year. Since February many studios have done business seven days a week, up from five. CPI is buying 100 more cameras this year to increase peak-shopping-season volume. Coming on line soon are new and faster cameras expected to increase efficiency by 40% and win over those edgy customers who wait in line only to end up with a photograph of a bored and whiny-looking youngster. If all that helps the way it is expected to, Essman and Sears' Ed Telling will remain pals for quite a spell.

Score one for the British

Britain's lumbering economy and slumbering entrepreneurial spirit do little to disprove the old saw that the nation is, in fact, a nation of shopkeepers. Yet the country's tradition of engineering excellence and ingenuity hasn't died entirely. Britain, after all, can still produce as fine an automobile as ever consumed eight gallons of gasoline to the mile, and it can still produce an occasional technological startup with real claims, rather than mere pretensions, to leadership. One of the hottest such companies in London these days is Feedback Group, whose financial and stock market performances seem to come right out of Silicon Valley.

Feedback has become a leader in two technologically fertile markets: machines for teaching and training electronics engineers and technicians, and machines for collecting and pro-

Feedback's Westcott and Strand
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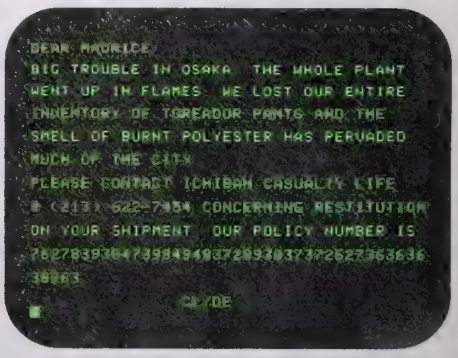

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cessing a variety of data on assembly-line production in factories. Still small, and still growing, Feedback's sales for the fiscal year ended in March 1982 amounted to only $9.2 million, but pretax profits were $1.5 million and return on equity was 24%. Since going public in November 1981, Feedback shares have risen in price from $1.44 each to $3.47 (at recent exchange rates), or 31 times earnings. The biggest winners in Feedback are its two founders, Professor John Westcott, an engineering lecturer at London's Imperial College, and Tom Strand, a former engineer for British Thomson Houston. Westcott beneficially owns 16% of Feedback's 8.4 million shares, and Strand owns 5.3%. Feedback's market value: $29 million.

If that's peanuts by Silicon Valley standards, it took a lot of risk and years of hard work—in a social and economic environment not especially conducive to either risk-taking or hard work—to achieve. Westcott, then 37, and Strand, then 35, started Feedback in 1958 with only $8,000. The cash came from savings, a small bank overdraft, and a second-mortgage loan on Westcott's home. Westcott and Strand had persuaded themselves—in the face of naysaying throughout British industry that their idea was farfetched—of the existence of a real market for machines to teach electromechanical and electronics principles. As a teacher, Westcott had toiled away day after day building makeshift gadgets to demonstrate basic engineering to his radar and electronics students. "But whenever I talked about it, people—manufacturers—laughed like mad," Westcott says. "They said the universities would never pay for it."

The universities were happy to pay for Feedback's machines, and they now appear in classrooms around the world, some 50 types all told. Basic electricity, electronics, telecommunications, microprocessor applications and many other theoretical and technical subjects get explicated on the dials and oscilloscopes of small Feedback instruments.

One machine, for example, simulates signal amplification in a transistor. Turning a dial to adjust current or voltage helps a student explore the different characteristics of amplifiers so that he can learn how to design them. Feedback makes a minilaboratory that, installed on a bench six feet long, permits a student to build and monitor the operation of 30 different electrical devices. The company makes a refrigeration and air-conditioning trainer—with the valves, couplings, gauges and other parts found on a real appliance—to teach troubleshooting and repair procedures to vocational students.

For industrial customers, Feedback makes both computer gear to keep track of production, quality rejections, work hours and other data and cartridge drives for monitoring telephone traffic. The company went into data processing in 1970. For years the decision seemed to be a mistake. Feedback floundered in the industrial market in part because it always lagged a step behind in technology. Meanwhile, data processing diverted the staff's attention from the fast-growing and profitable educational market, in which Feedback had a stronger position. But Westcott and Strand kept plugging away and finally began to win contracts as suppliers to entrenched European electronics firms—which then resold Feedback equipment to the factory and telecommunications market.

It was a 19th-century Britisher, George Boole, who invented the logic that now forms the structure of contemporary computer languages, but it was Americans and other foreigners who developed the languages and the machines to employ them. Westcott and Strand, though, have shown that British science and technology are still alive.—**Rosemary Brady**

Taco Viva. Hot today. But tomorrow?

As J. Brion Foulke III savors the spinach pasta at Zinno's, a Manhattan restaurant, he raves about his own homemade pasta, covetously eyes the waiter's cheese-grater and reminisces about the cooking school he and his wife attended last year.

There's a certain irony here. Junk food—that is, Mexican fast-food—finances Foulke's dabbling in haute cuisine. Foulke, 58, is the president of Taco Viva, a chain of 46 taco stands, and three or four times a week he cheerfully bolts his own chain's Wet Burritos and Craazy Tostadas dipped in the sauce known as El Scorcho. "I've always considered myself a Mexican missionary," he says.

Promoting the tamale gospel has made a lot of money for Foulke and other Mexican-food entrepreneurs, but it has taken time to convert the heathen. When Foulke, a former electronics executive, bought his first Mexican restaurant in 1968, Floridians were slow to take to spicy chow. Foulke expanded slowly, accumulating just nine outlets over the next ten years. Since the beginning of 1979, however, Foulke has sprinkled five times as many restaurants along Florida's east coast, as well as two in Georgia. Sales rose from $3.4 million to some $16 million, with a 22% average return on equity. Taco Viva went public last November at $9 a share, promptly split 3-for-2 and now sells at around $20.

That kind of growth has been typical of Mexican fast-food franchises and chains in the past few years. Foulke is atypical only in that he has resisted the temptation to franchise. "Everybody wants to franchise," says Michael Culp, a restaurant analyst at Pruden-

Taco Viva's J. Brion Foulke III
Craazy Tostadas to convert the heathen.

tial-Bache. "An efficient operator can drop 50 cents to 75 cents out of every royalty dollar to the bottom line."

So what? Foulke responds. He considers the prospect of losing quality and doubling overhead in return for the thankless task of handholding franchisees a dismal one, no matter how profitable. But there's more to Foulke's antagonism. Some 15 years ago he himself bought a Taco Tico franchise, got to spatting over marketing and management practices and finally renamed his franchise to start his Taco Viva chain. He thinks he can make it grow by 35% a year over the next five years even without franchising.

Yet it's not all that easy. For one thing, consider the food. Some foodtasters fail to share the enthusiasm of Tampa secretary Angela Rutger and Boca Raton stockbroker Barry Levensonn, who think the 40 combos and six sauces Taco Viva dishes out in under a minute each are tasty. One fast-food expert who invested in new Taco Viva shares found the fare "barely edible" during a trip to Florida—and forthwith sold his stock.

Still, in the fast-food business, consistency of quality counts as much as quality alone, and fast service and price count even more. The average tab at Taco Viva is $3.64. So Foulke's real worry won't come from a Chi Chi's or General Mills' Casa Gallardo, which have sit-down service and fancier offerings, but from other taco tossers like the franchised Taco Bell.

For the moment there seems enough room for everybody. Mexican is the fastest-growing single segment of the fast foods. Securities analysts think the market will more than double in four years. But then, says Michael Van Dress, an Agriculture Department economist, the growth rate of all eateries will fall to half of its frantic pace during the Seventies. That will hurt the chains more than franchise operations. "If you don't franchise," says Michael Esposito of Oppenheimer, "you can't preempt the market, and you run the risk of being encapsulated in your market." Taco Viva may become vulnerable. Foulke is still planting most of his new restaurants in Florida and has chosen to place them closer together in order to box out the competition. That, of course, has led to lower sales per stand, and it has lengthened his payback period.

That suits Foulke just fine. "How big do you really need to get?" he asks.—**Ellyn Spragins**

Jigsaws, money and freedom

Pat Duncan of Great American Puzzle Factory
What to do for an encore?

The daughter of an Iowa furnace repairman and air-conditioner installer, Pat Duncan had big ambitions. When she was graduated from the University of Iowa in the late 1960s, she took the first bus to New York City. "I figured if I stayed in Iowa I'd wind up as a nurse, teacher, secretary or farmer," she says.

Now Duncan runs her own business, with estimated sales of more than $2 million a year. Her firm, the Great American Puzzle Factory, founded in 1976, claims second place in supplying jigsaw puzzles to the gift store and catalog market. It's well behind the industry leader, Hallmark, but a bit ahead of Textron's Sheaffer Eaton subsidiary.

Great American pays a standard 5% royalty to Hershey Foods and Anheuser-Busch for the right to make puzzles depicting Hershey's kisses and Budweiser cans. For the hot-selling Garfield the cat line of ten puzzles, it pays United Feature Syndicate an undisclosed, but larger than standard, royalty. The single bestselling puzzle for the past four years has been a Paul Palnik cartoon that depicts 1,000 tiny nudes. Great American also custom-makes promotional puzzles for such clients as Neiman-Marcus.

Never a puzzle fan as a child, Duncan started her own puzzle business after an earlier, unsuccessful joint venture in the field with a longtime friend. The experience taught her some lessons: Let out manufacturing contracts, for example, to more than one source, and install computer accounting and inventory control early in the game. To succeed in the puzzle business, however, requires marketing savvy, too. Some rules: Splash the puzzles with color and choose topical themes; cartoon characters and familiar objects, such as beer cans, now sell, while reproductions of Old Masters do not. Be trendy, but not too trendy, because a puzzle must sell in Tucson and Peoria as well as Manhattan and Beverly Hills.

Great American sells puzzles to gift stores for $3.50 each. The puzzles retail for $7. Earnings growth has been steady except in recessionary 1982, when profits dropped about 20%. But where will new growth come? That's a puzzle. "I'm stumped," confesses Duncan. She's considering diversification or acquisitions. One thing she probably won't do is enter the low-margin toy-store puzzle market, dominated by Milton Bradley.

Duncan has had several feelers about selling the business. "I'd consider the right offer," she says. "But if I got it, I'd just turn around and start another business. I'm very money-motivated. I think money buys you freedom."—**John R. Dorfman**

SOLID STATE.

The recent growth of "high-tech" industries has underscored the value of New Jersey's long term commitment to science and technology.

From Princeton's Institute for Advanced Studies and Rutgers, the State University, to the 28 state-approved vocational schools, the goal remains the same – to provide industry with the productive, quality workforce so critical in today's competitive marketplace.

Consider our educational resources, for example. New Jersey has five universities, 21 four-year colleges, 22 two-year colleges, a state college of engineering and architecture, plus a state medical and dental college.

Consider research and development. Nearly 10% of the nation's total R&D dollars are spent in New Jersey. 90% of these funds come from private industry. This makes New Jersey not only the leader in privately funded research, but the nation's leader in R&D overall.

Moreover, the State Government is dedicated to creating ideal conditions for business growth in New Jersey. In 1982, the N.J. Economic Development Authority channeled over $850 million in low interest financing, to encourage new business development and expansion here.

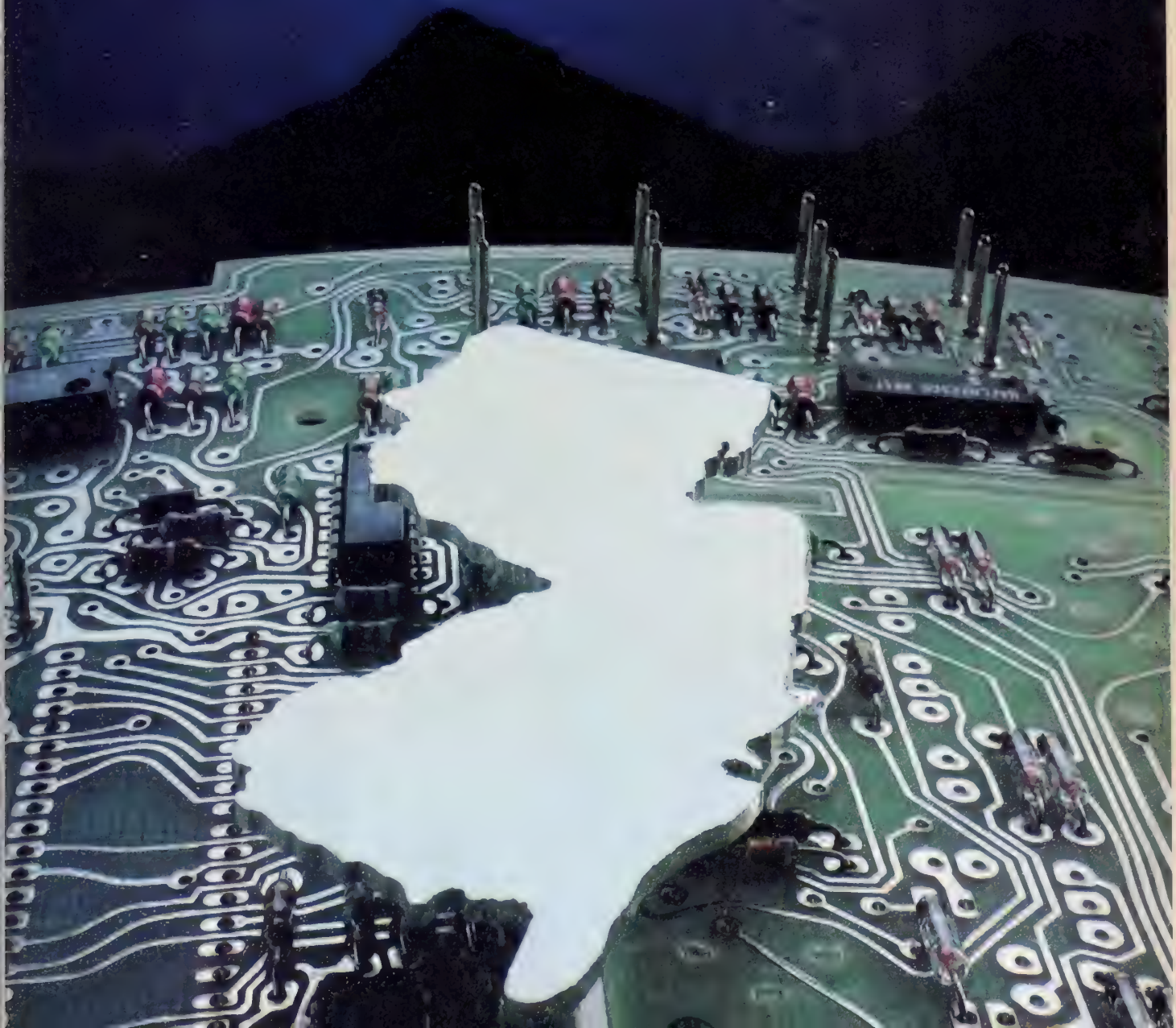
New Jersey also offers many advantages in terms of location, people and lifestyles. The talent of our people is but one reason for saying: "New Jersey and You...Perfect Together."

To learn more about New Jersey contact:

Borden R. Putnam, Commissioner
Department of Commerce & Economic Development
CN 820, Trenton, NJ 08625
Phone (609) 292-2444

Thomas H. Kean, Governor

NJ & You
Perfect Together



Edited by Stephen Kindel

With a new computer-aided technique, physicians can produce detailed color maps of brain activity that reveal tumors, epilepsy, even mental illness.

Brain storms

By Jon Schriber

THE IMAGE THAT FLOWS across the video display console looks like some brilliantly hued planet seen from the depths of space. Color contours the surface, sometimes in a concentric swirl near the center of the orb, sometimes in waves that crash around the edges. But these are not the colossal atmospheric disturbances of another planet. They are, in fact, the electrical storms of a human brain.

Sophisticated machines already exist to probe the anatomical structure of the brain: CT (computer tomography) scans, PET (positron emission tomography) scans and NMR (nuclear magnetic resonance) scans. Now there are computer-generated video images of brain electrical activity as well, which give medical science topographical maps of the brain as it functions. Physicians are making use of them in extraordinary ways.

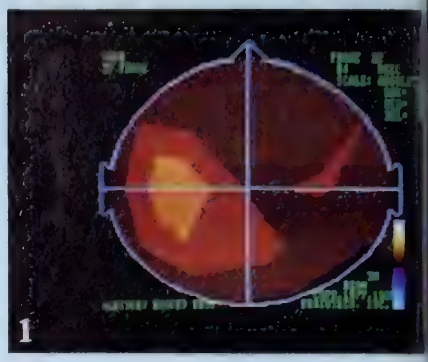
"We use brain mapping a great deal for evaluating all kinds of cognitive functions," says Dr. Roy John, director of the Brain Research Laboratory of the Department of Psychiatry at New York University Medical Center, where a prototype brain wave mapping device has been in use for about a year. "They include cognitive dysfunctions, presenile dementias [such as Alzheimer's disease], alcohol-related disruptions in functions, mild head injuries and psychoses, including schizophrenia and manic depression."

Brain wave mapping devices are also turning up in the operating theater (NYU has used them in about 120 operations), where cerebral cortex functions are monitored during an operation to warn a neurosurgeon of the first sign of brain damage. At Children's Hospital in Boston, similar mapping devices in clinical use for two years have diagnosed covert epilepsy, covert brain infarcts (strokes in newborn infants) and recurrent brain tumors. Will every major hospital and medical center in the country soon be clamoring for its own brain wave machine? "In a word, yes," says NYU's John.

The specific source of John's excitement is a group of machines known by various trade names, such as Brain State Analyzer or BEAM, an acronym for brain electrical activity mapping. The pioneers in the field, builders of the Children's Hospital BEAM system, are David Culver, an electrical engineer and computer programmer, and Dr. Frank Duffy, an electrical engineer, mathematician and physician associated with Harvard Medical School and Children's Hospital.

Culver and Duffy make a brilliant if slightly eccentric pair. After studies at MIT in 1966, Culver went off to design and build sailboats in Maine for a few years. Tiring of the rustic life, he did a brief stint as a computer programmer with a then small company, Digital Equipment Corp. "I worked there for eight months," he says. "It was the only real job I ever had." He had his own consultancy business when Duffy, looking for a programmer, sought him out.

That was in 1969. Duffy first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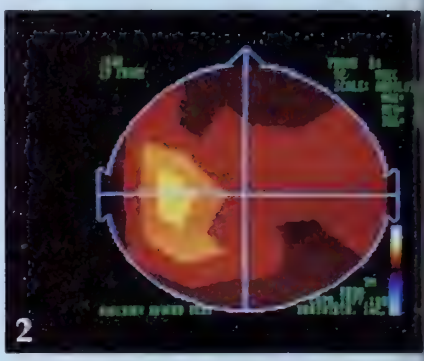
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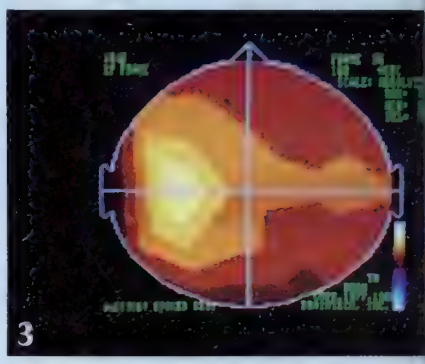
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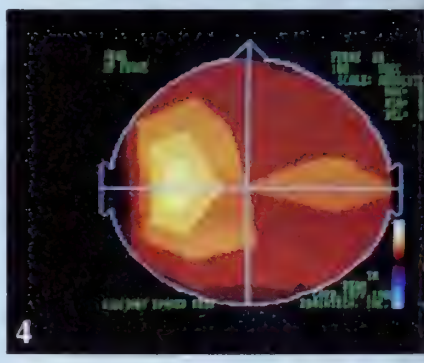
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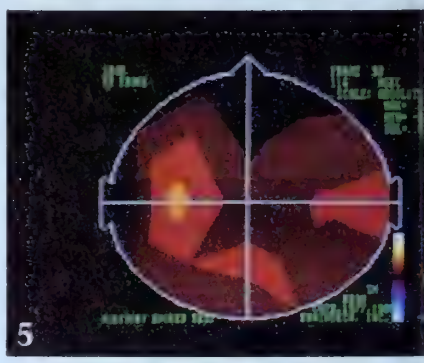
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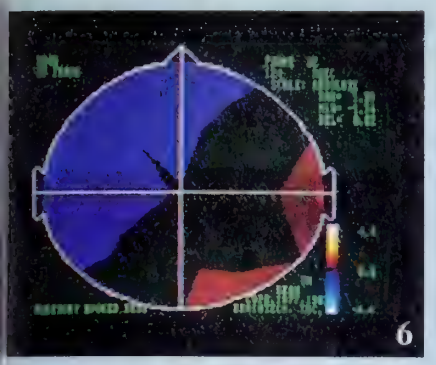
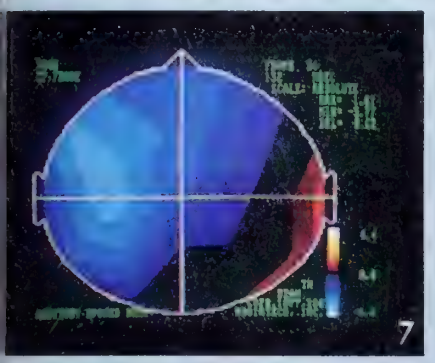
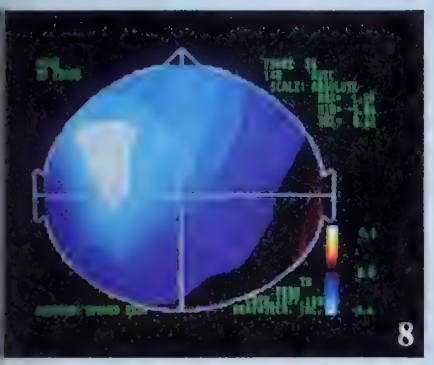
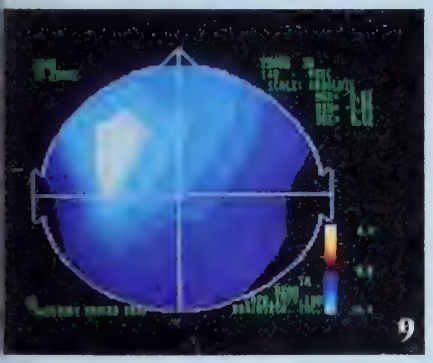
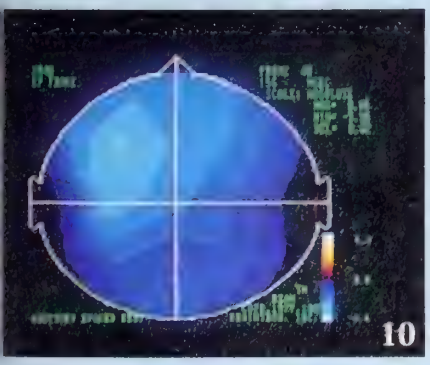




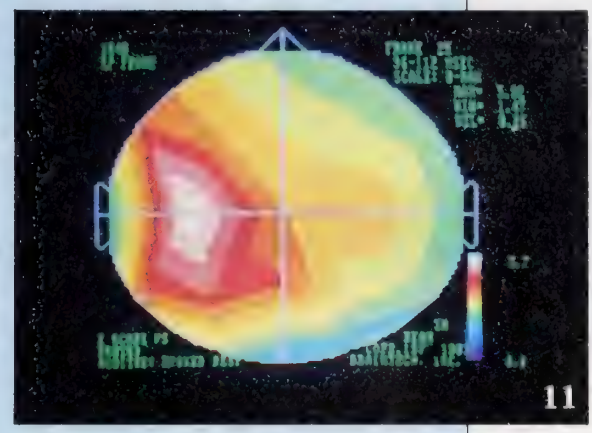






Tracking a brain storm

This vivid color sequence of brain electrical activity mapping (BEAM) captures the evoked responses of the brain of a 50-year-old man. An earlier diagnosis made on the basis of CT scans found that the patient had a gliablastoma, a type of brain tumor with a 90% fatality rate. While the tumor was in remission, the patient's doctor requested BEAM maps, since they more quickly detect resumption of tumor growth that was almost sure to follow. The remission did end. The faster tumor growth is visible in these plates as a mass of colors on the center line in the left hemisphere. In frames 1 through 5, the abnormality is highlighted by a yellowish island (for positive electrical activity) in a darker sea of concentric waves. The tumor reemerges as a blue swirl (for negative electrical energy) as the sequence continues in



frames 6 through 10. In the lower right corner of each picture is a color-coded scale for the electrical amplitude range, from high (yellow) to low (blue). These 10 exposures are part of a standard series of 128 frames taken in just half a second—the instant immediately following the sharp click used as an auditory stimulus to evoke a response in the brain. From these, a BEAM movie is made. It is an animated replication of the brain's electrical activity, and is compared by computer analysis to the reaction of a normal population. A map summarizing the subject's images and measuring the deviance from normal is then produced (11). For this patient, the white area over the center of the tumor shows an extraordinary degree of abnormality. The patient, a former newspaper editor, died shortly after these pictures were taken.

worked with Culver, who had been recommended by Digital, in the Army when doing research on organophosphate (nerve gas) poisoning. Duffy used an electroencephalogram (EEG) to study brain waves of people suspected of having been exposed to the substance.

Five years later Duffy, out of the Army, came up with the idea for BEAM. After trying to interest several companies in it, he turned to his old colleague, Culver. "He thought it would be nice to map topographically the brain wave EEG data we had been analyzing for years," Culver recalls. The concept for brain wave mapping was simple: Marry an EEG machine with a high-speed computer and video monitor.

The technique works by using an ordinary electroencephalogram to collect the raw data. A standard grid pattern of 20 electrodes is pasted onto a subject's scalp to detect the slight variations of voltages and frequencies in the electrical firing of his 10 billion nerve cells. These impulses are then translated into parallel rows of jagged lines, much like a seismograph. A trained physician interprets their meaning by eyeballing his way through the reams of printouts. The brain waves of an epileptic, for instance, are readily identifiable by "spikes" or broad wriggles in the sawtooth-like EEG lines. "But for most abnormalities and diseases," says Duffy, "the discontinuities are very hard to spot by eye."

Enter the computer, which accepts the output of a 20-channel EEG and automatically converts it to a color contour map of the brain's electrical charges—a sort of weather map of fleeting thoughts, scattered emotions and cool perceptions. With different shades assigned to different voltages, subtle imbalances in electrical activity stand out in stark contrast. Presto. A neurologist who once had to try to visualize such an image in his head after scrutinizing reams of EEG scratchings now can see it before his eyes in living color.

The system that Culver and Duffy made in the mid-1970s forced them to use great ingenuity to build a sophisticated piece of equipment. "We built part of our first topological display device by going to a science magazine and getting the plans for a display unit," says Duffy, a confirmed do-it-yourself ham radio buff. But there is nothing rudimentary about the BEAM

DEMAND WAS GROWING. SO WERE PRODUCTION COSTS. INCREASED PRODUCTIVITY WAS THE SOLUTION... BUT COULD OUR PEOPLE ACHIEVE IT?

MAZDA'S 126.4%

Anyone who has watched Mazda over the past seven years has witnessed something out of the ordinary.

An extraordinary increase in productivity.

Productivity has risen 126.4% as production volume climbed from 19.3 vehicles per employee in 1975 to 43.7 vehicles in 1982.

This dramatic increase was our solution to the problem of gaining control of production costs which began to spiral rapidly upward during the mid-'70s.

Increased productivity also allowed us to satisfy a growing demand for our products in markets around the world. In CY 1982, this demand thrust Mazda above the 1.1 million-unit mark in production, and once again made us the third-largest automaker in Japan.

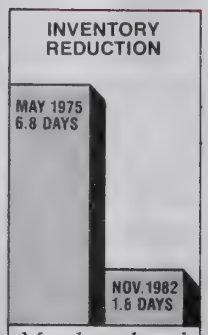
By helping to design work motion charts, our people are making assembly line operations more efficient.

A MAJOR REDUCTION OF INVENTORY.

Our plan to increase productivity was vast in scope. Yet, in essence, it was but an effort to reduce costs while continuing to produce high quality automobiles in the shortest possible time.

Our *Operation 50* program is one example of this effort. It worked to reduce our inventory of in-process production parts and materials by 50% over a three year period. And continuing efforts have resulted in even further reductions as inventory has been trimmed from 6.8 days supply in 1975 to only 1.8 days in 1982.

Inventory reduction resulted in a tremendous savings in expenses. It also revealed snags in the production process which would have otherwise remained hidden. By eliminating these snags, we were able to achieve a significant improvement in both the flow of production and the reliability of production-related equipment.



Mazda reduced inventory 73% since 1975.

A NEW PRODUCTION SYSTEM.

Inventory reduction ushered in our new system of synchronized production.

We no longer maintain large inventories of parts and materials. Rather, we bring these forward only as we need them, and schedule them to arrive at our production lines just in time for the next step in the manufacturing process.

This kind of synchronization demands tight coordination between our various divisions, as well as between us and our suppliers and their subcontractors. In fact, all of our domestic suppliers and subcontractors have met our standards for in-house quality control and now deliver directly to the production lines without any ongoing inspection on our part.

SOLUTION

PEOPLE PROVIDED THE SOLUTION.

Our people, workers and management alike, figure prominently in our effort to increase productivity.

Since 1975, they've contributed more than *six million* suggestions to improve productivity and quality—and more than 50% of their ideas have been adopted. Nearly 2.6 million suggestions were generated in 1982 alone. More than were received by any other automaker in Japan.

Sixteen of our people were also selected to spearhead Mazda's *MM Operation*, a program which finds them working closely with production management in an ongoing effort to spread proven productivity methods throughout the production system. And their participation has paid dividends, both in terms of improved productivity and higher quality standards.

AUTOMOBILE PRODUCTION IN JAPAN IN 1982

Maker	Units
1 Toyota	3,144,557
2 Nissan	2,407,734
3 Mazda	1,110,164
4 Honda	1,020,078
5 Mitsubishi	969,445
6 Suzuki	603,153
7 Subaru	513,506
8 Daihatsu	464,245
9 Isuzu	404,871
10 Hino	61,445

Mazda is Japan's third largest automaker.

A MORE PRODUCTIVE FUTURE.

Our goal is to create a production system that is capable of responding rapidly to shifts in market demand. And we've already made considerable progress toward this goal.

For example, our new Hofu plant, which began operation in September 1982, is capable of simultaneously assembling nine different automobile body types in three different model variations. And with 155 computer-controlled robots, Hofu clearly represents the state-of-the-art in terms of automation and production flexibility.

Robots improve productivity and also relieve our people of the more odious production tasks.

But while automation has become increasingly important to production operations, our people will continue to play the essential role.

The people at Mazda are committed to producing the highest quality products at the lowest possible cost, and in the shortest possible time.

And our 126.4% solution to the problem of controlling production costs is powerful evidence that this commitment is being fulfilled.

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Technology

now. In addition to mapping general brain wave activity, the device can be used for sensory evoked potentials. Evoked potentials are the reactions by the brain to sudden stimuli—a flash of light, a loud click, an electric shock. Since the response to a single stimulus would be lost in the ordinary background noise of brain activity, any stimulus has to be rapidly repeated hundreds of times to evoke enough response to measure. BEAM's computer averages the activity of the brain during the half-second after each flash and separates it into 128 individual frames, each "exposed" for four milliseconds. Playing them in rapid sequence is what animates the view of the brain into a sea of colored waves washing from one side of the cranium to the other *(see pictures)*.

Pathology, as might be expected, often produces asymmetrical patterns. But the problem with a simple visual inspection of the brain wave map is that it may not be obvious which side of the asymmetrical image is the abnormal or changed side. To solve this, the researchers employed a technique originally used to detect submerged submarines by their wakes on the ocean surface. By this method the images are reprocessed into new maps showing the degree of deviation from a norm. In a study on schizophrenia, for example, Duffy found that a control population of normal subjects and known schizophrenics had different brain wave patterns.

Indeed, the use of a normative data base to compare individual patient behavior is the secret of topological mapping's great potential as a diagnostic tool. "We find that the patterns displayed in these various head pictures tend to differ from disease to disease," explains NYU's John. "With the use of a normative base you can even begin to think about using the change in abnormality observed over time to guide you in the pharmacological management of patients."

Perhaps more important, brain wave mapping is useful in diagnosing maladies when there is no apparent anatomical problem. Certain kinds of epilepsy, for instance, are often not detected in routine EEG exams. The symptoms of one of these, temporal lobe epilepsy, can easily be misdiagnosed as schizophrenic behavior. "Once the patient ends up in a mental hospital," says Duffy, "unless he has a seizure, no one will ever think of epilepsy again." But a brain wave map will show the epilepsy.

Rapidly diagnosing recurrent tumors is also the province of the mapping technique. CT scans, which use X rays, are among the most effective means of locating tumors. But after chemotherapy, debris left from the treatment will impede the discovery of new tumor growth. Topological mapping can find a regrowth before irreversible brain damage occurs.

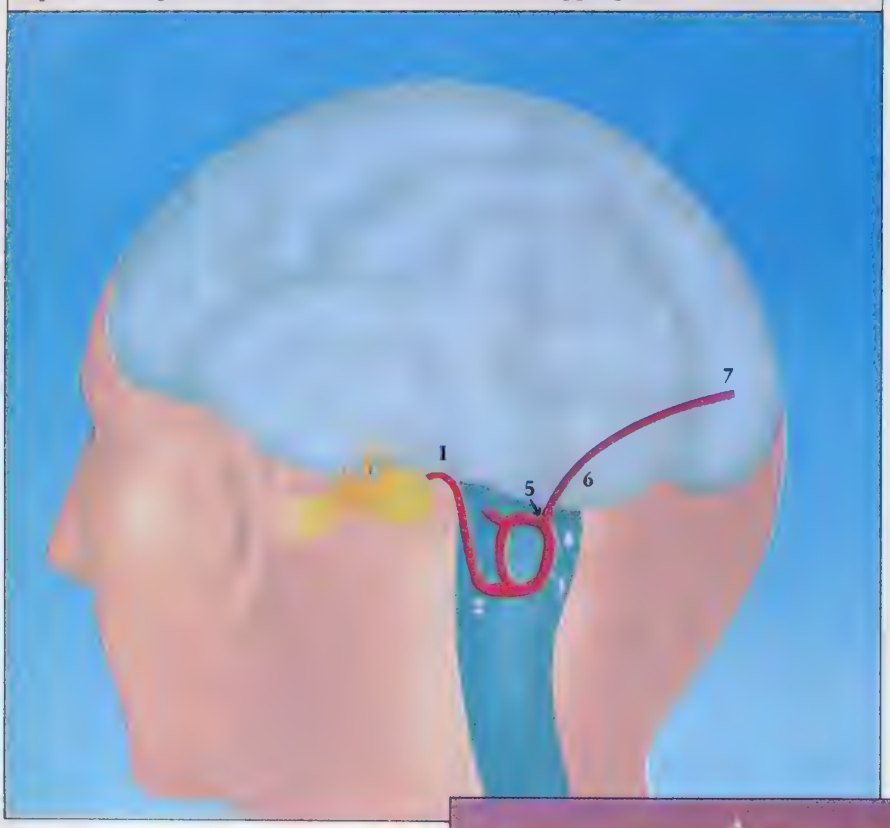
As good as it appears to be, both John and Duffy are of the opinion that topographical mapping is also a supplemental technique, meant to be used in conjunction with devices such as CT scanners and NMR.

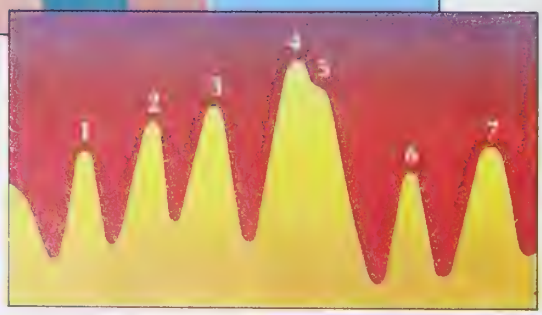
But like the devices they are meant to augment, brain mapping machines are not cheap. One model on the market in Japan and Europe, made by Nihon Kohden, a Japanese manufacturer of medical instruments, sells for a little over $80,000, but does not include the cost of a $25,000 EEG machine that is sold separately. Duffy faults the machine for being too slow and "not set up with control groups. It's just a toy."

The BEAM machine, the first production model of which is due in early summer, is certainly not a toy. Priced at over $500,000, it is the "Rolls-Royce" of mapping machines, according to David Culver. A third machine, made by Cordis Corp. of Miami, Fla., may be out shortly, pending Food & Drug Administration approval, at a price between $100,000 and $120,000. Says John, who designed it: "It is faster than the BEAM and it can contrast a subject's map with norms that include age

BEAMing back the answers

The senses are the brain's windows on the outside world, but through a technique known as "evoked response" they provide a critical pathway for physicians peering in. The reaction of each part of the brain stem to a flashing light or a sharp noise is easily recorded by oscilloscope tracings (1-7), but in the critical area—the upper brain—responses were too complex to map until the advent of brain wave mapping.





categories or the patient's previous condition. It also permits you to make serial measurements of a patient, to see how the state of the brain changes with treatment."

How broad might the market ultimately be? "I can't think of an area related to the brain where BEAM [or BEAM-like machines] isn't going to be used," says David Culver, speaking in his role as chairman of Braintech Inc., the maker of BEAM. "I can't even speculate on the uses outside of direct medicine, such as biofeedback or lie detection."

Or help advertisers get into the minds of consumers? The possibilities for brainstorming are limitless.

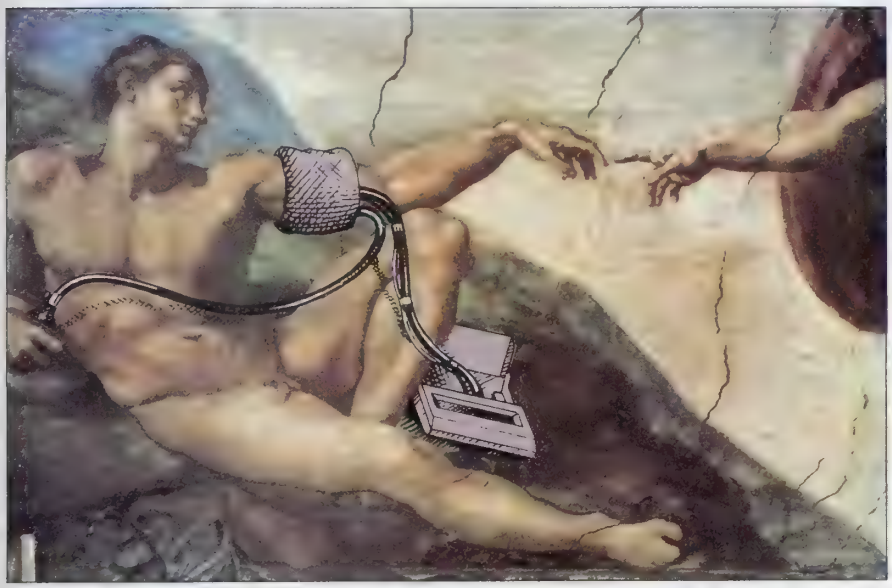
Bits of profit

Those workhorses of the new industrial age, the microprocessor and the random access memory, have been turned into yet another round of lifestyle improvements. This time, it is what is being called the "home medical electronics market," and it has lured Timex and GE, among others, into some serious spending in hopes of garnering a portion of that market, whatever it happens to be.

Timex, for example, has married a four-bit microprocessor to a small amount of memory and cheap, reliable sensors and transducers, and developed a line of health monitoring devices. Its Timex Medical Products subsidiary, based in Waterbury, Conn., has so far introduced three products: a digital electronic blood pressure meter, a computerized scale and a digital thermometer. The scale is accurate to within half a pound, the thermometer to within 0.2 of a degree Fahrenheit. The blood pressure monitor does away with the need for a stethoscope, automatically takes two or three readings and then gives an averaged readout of pulse and blood pressure.

Because of rapidly falling component prices, such accuracy comes at a surprisingly low cost. Timex sells the thermometer for $25, the blood pressure monitor for $70 and the scale for $50. Five years ago a thermometer accurate to within a millimeter of mercury would have cost $400. A blood pressure cuff of such sophistication simply did not exist.

But do we need such sophistication? Only a person on the most rigorous weight control program might need a scale of the accuracy that Timex provides, and the major users of a highly accurate digital thermometer are likely to be women who need to record basal temperature in order to time their ovulatory cycle. Hardly mass markets. Why, then, do such products appear?



The answer is simply that the microprocessors are available. In the almost frenetic drive to lower the cost of computers while boosting their power, chip manufacturers have invested billions of dollars in each new generation of memory and microprocessor power. The only way that those investments can pay off is in production runs of tens of millions of chips. It's much like the old vaudeville joke about the manufacturer who claims he loses a little on each item he makes, but that he makes it up in volume. Chip manufacturers do just that, and the only way they can get up to break-even—and actually start making money—is to spur the development of products that eat their way through chips by the ton. That's how we wind up with video games and game cartridges (both employ microprocessors and memory), talking cars, programmable washing machines and the home medical electronics market. In order to get to affordable computers that perform endless useful functions—industrial process monitoring, lifesaving, the movement of huge amounts of financial information—you have to wade through an awful lot of microprocessor-based frippery.

Fifty years ago the noted Swiss-born architect Le Corbusier wrote a manifesto deploring the trivialization of technology. For him, the creation of products whose main purpose was the absorption of surplus income from a rising middle class was an abomination, especially in a world still recovering from the ravages of World War I. Cheap housing and affordable furniture, argued Le Corbusier, had to come before radios and ornate consumer goods. He was wrong, of course. The needs of the middle class, "trivial" though they may be to a "Corbu," supplied the jobs that brought about post-World War I prosperity. Equally wrong today are those critics who deplore the waste of valuable computer resources on video games. In order for real growth to take place, the marketplace must have more goods from which to choose, not fewer.—**Martin Love**

Fat in the fire

For the soybean growers of America, life isn't all just pernuts and tofu. Producing one of the world's greatest sources of cheap protein, American soybean growers for years have ridden a roller coaster of demand and indifference for the meal, flour and oil that can be extracted from the hardy legume. The basic problem with soybeans is that, while their component chemicals can be reshaped into almost anything from breakfast sausage to mock chicken, they are essentially a poor man's food: In every country where soybeans are a staple, demand drops as incomes rise.

That drives the farmers who have staked their fortunes on soybeans crazy. But they have come up with a forward-looking solution by examining the lessons of history. Long before there was much of a food market for soybeans beyond the Far East, American chemical companies were buying the bean in quantity for its oil and fats and turning them into chemicals ranging from paints and plastics to explosives. Cheap petroleum ended the chemical demand for soybean oil

Technology

after World War II. But now, after the drop in petroleum prices, soybean oil is nearly competitive again with petroleum for certain chemical uses, and it's there that soybean growers hope to make their stand, backed up by some interesting research.

Soybean oil is amazingly versatile. It doesn't evaporate easily. If you add hydrogen to it, you get a high yield of fatty acids, those long carbon chains that give soaps, detergents and plastics their adhesive quality. It loses its odor easily in a simple refining process. It's biodegradable. And, unlike petroleum crude, which has varying qualities, soybean oil is always the same consistency. "It's well defined," says David Erickson, director of the oil program at the American Soybean Association. "It's clean. What you buy is what you get."

Some of what you get, and what has researchers excited, is:

• A pesticide carrier. Pesticides are mixed with water or petrochemicals before being sprayed. Water evaporates so quickly that you need a lot to lay down bug and weed killers, while petrochemical-based pesticides pollute the environment. Soybean oil is biodegradable, and, since it doesn't evaporate quickly, you need far less of it as a pesticide carrier: two quarts of soy oil per gallon of pesticide, compared with 15 quarts of water. "This has a lot of sex appeal to farmers," says Erickson. About 50 million pounds of soy and cottonseed oil are used as carriers right now. Erickson's estimate of use in five years: 500 million pounds.

• A grain-dust control. In the dry heat of summer, the fine dust in grain elevators can ignite, and blow an elevator to kingdom come. That's how 14 elevators exploded in 1982, killing 12 people. When sprayed over the grain, deodorized soybean oil can hold down 90% of that dust. Estimated future use: 200 million to 500 million pounds.

• A specialty chemical. The fatty acids derived from the oil have already been added to polyvinyl chloride to make plasticizers for garden hoses, coatings for household appliances and preservative agents for bread and other foods. With petrochemical fatty acids such as benzene and ethylene rising in price, chemical processors at the Procter & Gamble level are looking into soybean oil as a main ingredient in detergents, fabric softeners and high-quality plastics. The chemical industry could be using upwards of 280 million pounds of soybean oil in five years.

But there are some stones that could foul up the machinery. So far the chemical companies remain uncommitted, since many have already tried to break the petrochemical habit with tallow, a rich animal source of fatty acids. You can get more pure fatty acids per pound from soy oil, but with tallow selling at about 15 cents a pound and soy oil at about 19 cents, no one wants to invest in making yet another refinery conversion. Worse, if the price of soy oil drops and becomes really competitive with tallow, farmers and crushers—the processors of meal and oil—might not be able to make money no matter what the volume of soy oil offered on the market.

While American farmers maneuver, the world does not sit idly by. Other countries, Spain, Portugal and Greece among them, are acquiring the ability to process the soybeans they import—and to dump huge soy oil surpluses on the export market. Meanwhile, in the Far East, Malaysia is cranking out 4 million tons of palm oil a year, yet another source of fatty acids. Will the glut of vegetable oils ever go away?—**Christopher Power**

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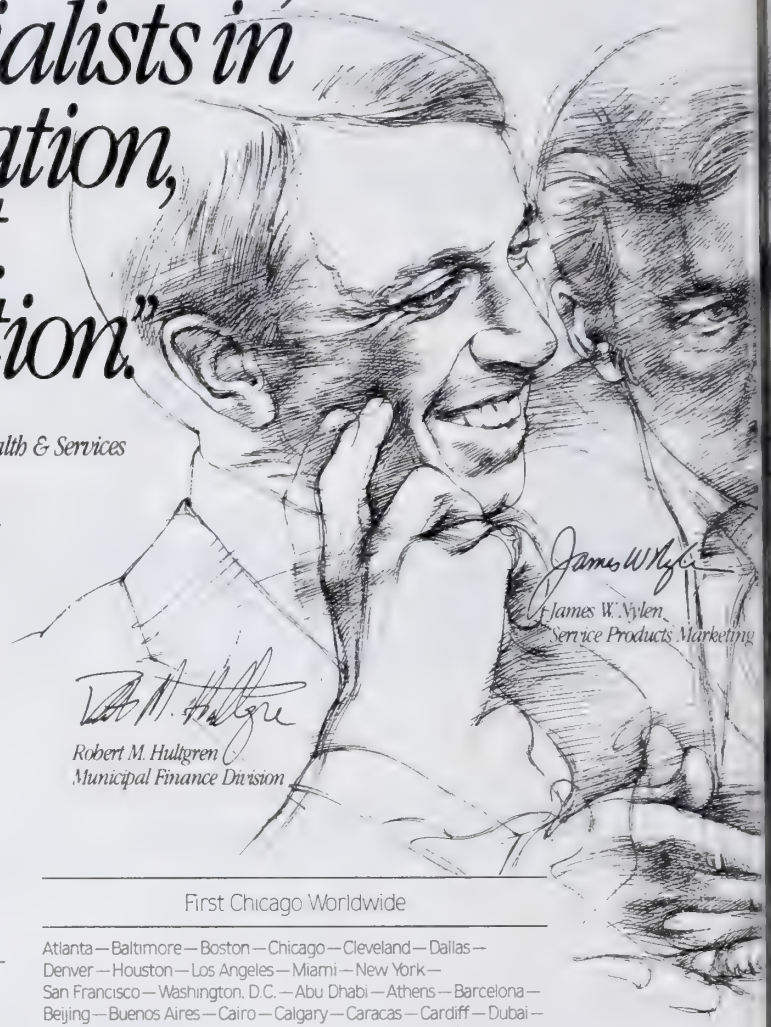

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Here's our list of chief executives' salaries. To get into the top ten it helps to work hard. But the odds go way up if you start your own company and it's in a service business.

The $50 million man

It may come as a shock to learn that in a recession year, when hundreds of businesses were running into the red and the jobless rolls were mounting, a pair of executives earned close to $100 million between them. The income of each of the top two executives on this roster—Federal Express' Frederick Smith and Toys "R" Us' Charles Lazarus—was double that of last year's leader. Smith took home a cool $51.5 million, and Lazarus earned $43.8 million.

These were not salaries but rewards for entrepreneurship. Smith founded Federal Express; Lazarus pulled Toys "R" Us up from bankruptcy. The bulk of their earnings came from the exercise of stock options granted years ago.

Smith, for example, had warrants to purchase Federal Express shares for only 63 cents. Its stock now trades at $82. That's because his ten-year-old company earned $78 million last year, employs 12,500 people and helped create the fast-growing air parcel delivery business. Toys "R" Us is nearly as big, with earnings of $64 million and over 10,000 employees.

Scan the names of the ten best-paid and you will find two other owner-managers. Ronald Assaf cofounded Sensormatic Electronics, which makes electronic detectors for retailers, in 1967, and Richard Eamer helped launch National Medical Enterprises, the hospital management company, in 1969. Both entrepreneurs scored big in 1982 by acquiring low-cost shares.

In this year's top ten the first seven firms are service companies. They do everything from offering financial advice to towing oil rigs. Representatives of classic smokestack America? Way down the list.

Our survey includes the chief executives of 808 companies that were ranked in one or more of the Forbes 500s lists. And here's the interesting point: The big rewards do not go—as the public seemingly thinks—to those who run our big corporations. Rock stars, athletes and TV personalities make much more money than most senior executives in large corporations. If you want to make more money than Jane Fonda or Willie Nelson, don't work for Exxon or IBM; start your own business.

Making comparisons can be tricky. Year-to-year earnings figures can be distorted by compensation deferred from prior periods and paid in 1982. Particularly big numbers often mean that an executive is benefiting from stock appreciation over an extended period of time.

Note, too, that our figures are for chief executives only—and in businesses in which incentive compensation is common, the boss is not necessarily the man with the biggest paycheck. Disclosure rules require that a corporation list only the earnings of its five highest-paid officers. At Phibro-Salomon, for example, that didn't include Chief Executive David Tendler. John Gutfreund, who runs Salomon Brothers and scored big because of booming brokerage business, took home $2.5 million in salary and bonuses.

Even with its limits, of course, this list makes for fascinating reading. But while you are recasting your career goals to join the big payers, keep your eye on Wall Street. Stock appreciation is a major component of most seven-figure compensation packages. With the market's rash of new records, don't be surprised if 1983 brings the first $100 million man.

Definitions

The Securities & Exchange Commission's latest requirements for proxy statements are the basis for the numbers in the table that follows.

Salary and bonus
Includes—in addition to salary and cash bonuses—directors' fees, commissions and payments made on long-term incentive plans.

Benefits
Includes cash-equivalent forms of compensation such as company-paid life insurance premiums or club dues, use of company car or plane and other fringe benefits; also stock bonus awards, thrift plan contributions and restricted stock awards vested or released from restrictions in 1982.

Contingent remuneration
Includes the amounts expensed for deferred compensation agreements and accruals (or credits) under performance-related long-term incentive plans.

Stock gains
Includes net value realized in shares or cash from the *exercise* of stock options and/or stock appreciation rights (SARs) granted in prior years. SARs may have been previously reported as contingent remuneration.

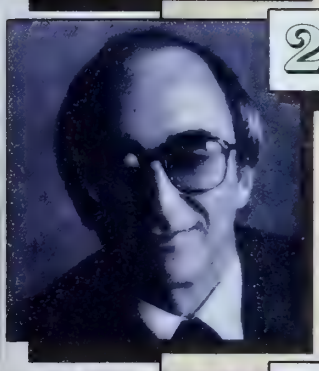
The Top Ten

1

Frederick W. Smith
Federal Express

Richard K. Eamer
National Medical Enterprises

$ 413,590	Salary & bonus	$ 675,183
704	Benefits	117,436
—	Contingent	—
51,129,969	Stock gains	2,652,099
$51,544,263	Total	$3,444,718

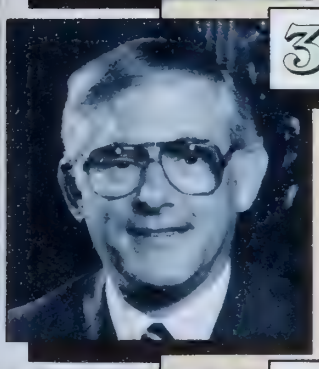


2

Charles Lazarus
Toys 'R' Us

John P. Laborde
Tidewater

$ 1,430,616	Salary & bonus	$ 708,161
12,292	Benefits	4,956
45,400	Contingent	32,041
42,359,753	Stock gains	2,468,372
$43,848,061	Total	$3,213,530

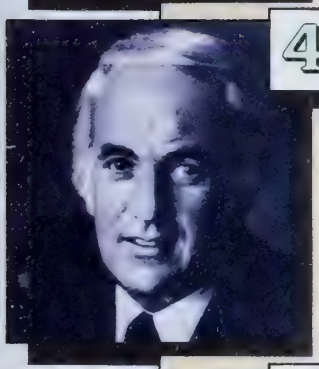


3

Ronald G. Assaf
Sensormatic Electronics

David J. Mahoney
Norton Simon

$ 249,712	Salary & bonus	$ 887,917
33,276	Benefits	351,577
7,826	Contingent	611,121
6,994,715	Stock gains	1,145,421
$7,285,529	Total	$2,996,036



4

Steven J. Ross
Warner Communications

Thomas V. Jones
Northrop

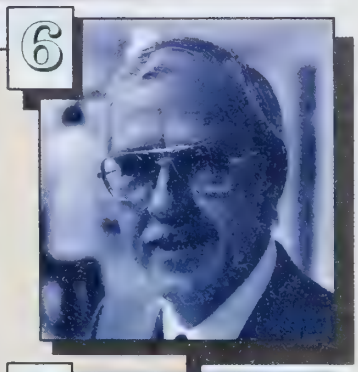
$2,301,497	Salary & bonus	$1,181,414
95,741	Benefits	351,626
1,283,835	Contingent	1,377,595
—	Stock gains	—
$3,681,073	Total	$2,910,635

5

George L. Shinn
First Boston

Harrington Drake
Dun & Bradstreet

$2,000,000	Salary & bonus	$ 750,000
73,876	Benefits	74,897
369,170	Contingent	19,567
1,089,757	Stock gains	1,701,170
$3,532,803	Total	$2,545,634



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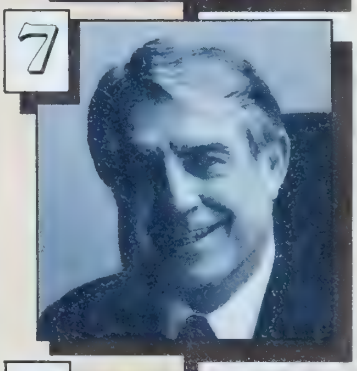

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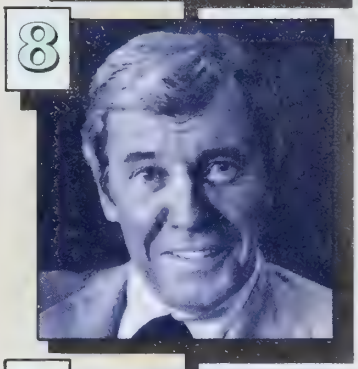

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While shooting a commercial with the 1980 America's Cup defenders, we saw for ourselves that winning takes skill, dedication, and teamwork. We like to think that describes us as well.

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Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Bus backgr
48	Borg-Warner	James F Beré (60)	534	48	382	391	**1,355**	22	11	Chicago, Ill	Produ
657	Boston Edison	Thomas J Galligan Jr (63)	275	9	—	—	**284**	29	12	Watertown, Mass	Fir
11	Bristol-Myers	Richard L Gelb (59)	966	17	17	1,406	**2,406**	33	11	New York, NY	Administr
741	Broadview Financial	John E Rupert (55)	198	4	7	—	**209**	29	9	Cleveland, Ohio	Administr
743	Brooklyn Union Gas	Eugene H Luntey (62)	193	15	—	—	**209**	35	7	Buhl, Ida	Opera
459	Brown-Forman Dist	W L Lyons Brown Jr (46)	425	4	—	—	**429**	22	7	Louisville, Ky	Mark
378	Brown Group	Bernard A Bridgewater Jr (49)	437	—	65	—	**502**	4	1	Tulsa, Okla	Administr.
511	Browning-Ferris Inds	Harry J Phillips Sr (53)	380	9	—	—	**389**	13	5	Memphis, Tenn	Fou
228	Brunswick	Jack F Reichert (52)	408	114	171	—	**693**	26	1	West Allis, Wisc	Mark
348	Burlington Inds	William A Klopman (61)	365	58	119	—	**542**	37	6	New York, NY	Mark
78	Burlington Northern	Richard M Bressler (52)	835	93	222	—	**1,149**	3	3	Wayne, Neb	Fin
126	Burroughs	W Michael Blumenthal (57)	744	14	44	163	**965**	3	2	Germany	Administr.
620	Cabot	Robert A Charpie (57)	517	—	–209	—	**308**	14	14	Cleveland, Ohio	Tech
737	California First Bnk	Yasushi Sumiya (55)	182	29	3	—	**214**	2	2	Japan	Bar
531	Cameron Iron Works	Myron A Wright (72)	362	13	—	—	**375**	6	6	Blair, Okla	Administra
421	Campbell Soup	R Gordon McGovern (56)	448	9	5	—	**462**	27	2	Norristown, Pa	Mark
363	Capital Cities Commun	Thomas S Murphy (58)	435	16	63	—	**514**	28	16	Brooklyn, NY	Administra
166	Capital Holding	Thomas C Simons (54)	557	11	268	—	**836**	5	5	Pasadena, Cal	Insur
246	Carnation	H Everett Olson (76)	425	114	—	123	**662**	51	15	Chicago, Ill	Fin
644	Carolina Pwr & Lt	Sherwood H Smith Jr (48)	245	3	41	—	**289**	18	3	Jacksonville, Fla	I
369	Carter Hawley Hale	Philip M Hawley (57)	502	8	—	—	**510**	25	6	Portland, Ore	Reta
790	Castle & Cooke	[15]Henry B Clark Jr (67)	167	—	—	—	**167**	37	1	Chevy Chase, Md	Administra
258	Caterpillar Tractor	Lee L Morgan (63)	598	13	30	—	**642**	37	5	Aledo, Ill	Mark
306	CBI Industries	William A Pogue (55)	349	95	145	—	**588**	29	1	Birmingham, Ala	
209	CBS	Thomas H Wyman (53)	664	9	51	—	**723**	3	3	St Louis, Mo	Mark
574	CBT	Walter J Connolly Jr (54)	336	2	—	—	**338**	22	6	Boston, Mass	Ban
524	Celanese	John D Macomber (55)	390	17	–75	48	**380**	10	5	Rochester, NY	Administra
581	Celeron	Gale L Galloway (53)	327	6	—	—	**334**	9	3	Pearsall, Tex	Opera
326	Centel	Robert P Reuss (65)	429	9	121	—	**558**	10	10	Aurora, Ill	Opera
493	Centerre Bancorp	Clarence C Barksdale (51)	299	10	—	91	**401**	24	5	St Louis, Mo	Ban
635	Central & South West	Durwood Chalker (59)	282	14	—	—	**296**	33	3	Breckenridge, Tex	Tech
603	Central Bancorp	Oliver W Birckhead (61)	220	100	—	—	**320**	32	11	Brooklyn, NY	Administra
513	Central Bancshares	Harry B Brock Jr (57)	378	10	—	—	**388**	12	12	Fort Payne, Ala	Fou
641	Central Fidelity Bks	Carroll L Saine (49)	250	—	8	35	**293**	26	2	Lincolnton, NC	Ban
796	Central Ill Pub Svc	Donald G Raymer (58)	151	8	—	—	**160**	35	2	Jackson, Mich	Operat
624	Central Soya	Douglas G Fleming (53)	295	9	—	—	**304**	29	3	Harvey, Ill	
692	Centran	Wilson M Brown Jr (56)	245	12	—	—	**257**	4	2	Richmond, Va	Ban
350	Champion Intl	Andrew C Sigler (51)	519	18	1	—	**538**	26	8	Brooklyn, NY	
801	Charter	Raymond K Mason (56)	71	72	6	—	**149**	31	20	Jacksonville, Fla	Fou
767	CharterCorp	Gordon E Wells (55)	183	6	—	—	**188**	31	6	Hamburg, Iowa	Ban
260	Chase Manhattan	Willard C Butcher (56)	613	23	—	—	**636**	36	3	Bronxville, NY	Ban
92	Chemical New York	Donald C Platten (64)	1,031	52	—	—	**1,083**	42	10	New York, NY	Ban
233	Chesebrough-Pond's	Ralph E Ward (62)	476	210	—	—	**686**	36	15	Scotch Plains, NJ	Marke
548	Chrysler	Lee Iacocca (58)	366	—	—	—	**366**	4	3	Allentown, Pa	Operat
405	Chubb	Henry U Harder (58)	358	—	125	—	**483**	34	2	New York, NY	Insur
179	CIGNA	Robert D Kilpatrick (59)	498	62	226	—	**786**	1	1	Fairbanks, La	Insur.
714	Cincinnati G & E	William H Dickhoner (61)	198	—	36	—	**233**	42	7	Cincinnati, Ohio	Techr
437	Cincinnati Milacron	James A D Geier (57)	297	4	3	147	**450**	32	13	Cincinnati, Ohio	Techr
76	Citicorp	Walter B Wriston (63)	905	19	233	—	**1,157**	37	13	Middletown, Conn	Ban
648	Citizens & Sthrn Ga	Bennett A Brown (54)	284	3	—	—	**287**	28	5	Kingstree, SC	Ban

[1]For FORBES definitions and methodology see page 126.
[15] Succeeded by Ian R. Wilson, 3/21/83.

Who Gets The Most Pay

Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Business background
Citizens Fidelity	J David Grissom (44)	296	—	—	—	**296**	10	6	Portsmouth, Ohio	Legal
City Federal S & L	Gilbert G Roessner (65)	387	97	241	—	**724**	42	13	Irvington, NJ	Banking
City Investing	George T Scharffenberger (64)	1,123	18	181	766	**2,089**	17	17	Ridgewood, NJ	Operations
City National	Bram Goldsmith (60)	431	—	65	—	**496**	8	8	Chicago, Ill	Finance
Cleveland Elec Illum	Robert M Ginn (59)	257	21	8	—	**286**	34	4	Detroit, Mich	Technical
Clorox	Calvin S Hatch (62)	368	23	—	—	**390**	11	2	Salt Lake City, Utah	Sales
Coastal Corp	Oscar S Wyatt Jr (58)	500	1	—	—	**501**	27	27	Beaumont, Tex	Founder
Coca-Cola	Roberto C Goizueta (52)	1,075	27	75	—	**1,178**	28	2	Cuba	Technical
Colgate-Palmolive	Keith Crane (62)	718	34	275	—	**1,027**	46	4	New Zealand	Marketing
Colonial Penn Group	John J MacWilliams (54)	425	22	267	—	**714**	14	13	Syracuse, NY	Administration
Colorado Natl Bnkshs	Bruce M Rockwell (60)	183	14	—	3	**200**	30	7	Denver, Colo	Banking
Colt Industries	George A Strichman (66)	394	178	—	—	**572**	20	20	Schenectady, NY	Administration
Columbia Gas System	W Frederick Laird (63)	416	27	—	—	**443**	31	2	London, Ohio	Legal
Combined Internatl	Patrick G Ryan (46)	396	21	32	—	**448**	20	1	Milwaukee, Wisc	Insurance
Combustion Eng	Arthur J Santry Jr (64)	1,105	—	250	446	**1,801**	27	20	Brookline, Mass	Legal
Comerica	Donald R Mandich (57)	372	14	—	—	**386**	32	2	Milwaukee, Wisc	Banking
Commerce Bancshrs	James M Kemper Jr (61)	165	8	—	—	**173**	36	16	Kansas City, Mo	Banking
Commerce Clearing	Richard T Merrill (55)	234	22	—	—	**257**	30	3	Chicago, Ill	Administration
Commerce Union	William F Earthman (57)	216	3	10	—	**228**	29	11	Nashville, Tenn	Finance
Commonwlth Edison	James J O'Connor (46)	266	8	—	—	**274**	19	3	Chicago, Ill	Administration
Comsat	Joseph V Charyk (62)	402	12	—	—	**414**	20	13	Canmore, Can	Administration
Computervision	James R Berrett (43)	300*	150	64	—	**513**	1	1	Greenwood, Wisc	Technical
ConAgra	Charles M Harper (55)	768	325	378	—	**1,470**	8	7	Lansing, Mich	Administration
Consolidated Edison	Arthur Hauspurg (58)	373	38	—	—	**411**	14	1	New York, NY	Technical
Consolidated Foods	John H Bryan Jr (46)	727	11	94	—	**832**	23	8	West Point, Miss	Administration
Consol Freightways	Raymond F O'Brien (61)	587	37	344	—	**968**	25	6	Atchison, Kan	Finance
Consol Natural Gas	George J Tankersley (62)	441	18	39	—	**498**	16	4	Ruston, La	Operations
Consumers Power	John D Selby (61)	332	—	16	—	**348**	8	5	Odebolt, Iowa	Technical
Continental Bancorp	Roy T Peraino (55)	366	—	—	—	**366**	25	13	Philadelphia, Pa	Finance
Continental Corp	John P Mascotte (44)	364	9	16	—	**388**	2	1	Fort Wayne, Ind	Insurance
Continental Group	S Bruce Smart Jr (60)	500	1	22	79	**603**	30	2	New York, NY	Marketing
Continental Illinois	Roger E Anderson (61)	499	143	38	—	**680**	36	10	Chicago, Ill	Banking
Continental Telecom	[16]Charles Wohlstetter (73)	489	60	85	—	**634**	22	11	New York, NY	Finance
Control Data	William C Norris (71)	553	1	—	—	**554**	25	25	Red Cloud, Neb	Founder
Convergent Technolgs	Allen H Michels (42)	191	1	—	—	**192**	3	2	Chicago, Ill	Founder
Cooper Industries	Robert Cizik (52)	576	22	–293	1,509	**1,814**	21	8	Scranton, Pa	Finance
Corning Glass Works	[17]Amory Houghton Jr (56)	407	15	18	—	**440**	31	19	Corning, NY	Operations
Cox Communications	[18]Clifford M Kirtland Jr (59)	338	—	—	—	**338**	19	9	Buffalo, NY	Finance
CPC International	James W McKee Jr (60)	560	12	–101	87	**558**	36	10	Pittsburgh, Pa	Finance
Crane	Thomas M Evans (72)	252	—	—	—	**252**	24	24	Pittsburgh, Pa	Finance
Cray Research	John A Rollwagen (42)	224	—	12	—	**237**	7	2	Minneapolis, Minn	Marketing
Crocker National	John B M Place (57)	354	19	—	—	**373**	5	1	New York, NY	Banking
Crown Central Petrol	Henry A Rosenberg Jr (53)	290	14	—	—	**304**	30	12	Pittsburgh, Pa	Administration
Crown Cork & Seal	John F Connelly (78)	180	2	—	—	**182**	26	26	Philadelphia, Pa	Sales
Crown Zellerbach	William T Creson (53)	300	12	11	—	**323**	6	1	Lafayette, Ind	Technical
CSX	Hays T Watkins (57)	440	17	—	57	**514**	34	1	Fern Creek, Ky	Finance
Cullen/Frost Bankers	Thomas C Frost (55)	331	15	—	—	**346**	33	12	San Antonio, Tex	Banking
Cummins Engine	Henry B Schacht (48)	589	62	27	21	**698**	18	13	Erie, Pa	Administration
Dana	Gerald B Mitchell (55)	612	18	—	145	**775**	39	3	Goderich, Can	Operations
Dart & Kraft	John M Richman (55)	784	42	525	—	**1,352**	28	4	New York, NY	Legal

alary annualized.

[1]For Forbes definitions and methodology see page 126.
[16] Succeeded by James V. Napier, 5/5/83.
[17] Succeeded by James R. Houghton, 4/12/83.
[18] Succeeded by William A. Schwartz, 3/31/83.

Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Busine backgrou
48	Borg-Warner	James F Beré (60)	534	48	382	391	1,355	22	11	Chicago, Ill	Producti
657	Boston Edison	Thomas J Galligan Jr (63)	275	9	—	—	284	29	12	Watertown, Mass	Finar
11	Bristol-Myers	Richard L Gelb (59)	966	17	17	1,406	2,406	33	11	New York, NY	Administrati
741	Broadview Financial	John E Rupert (55)	198	4	7	—	209	29	9	Cleveland, Ohio	Administrati
743	Brooklyn Union Gas	Eugene H Luntey (62)	193	15	—	—	209	35	7	Buhl, Ida	Operatic
459	Brown-Forman Dist	W L Lyons Brown Jr (46)	425	4	—	—	429	22	7	Louisville, Ky	Marketi
378	Brown Group	Bernard A Bridgewater Jr (49)	437	—	65	—	502	4	1	Tulsa, Okla	Administrati
511	Browning-Ferris Inds	Harry J Phillips Sr (53)	380	9	—	—	389	13	5	Memphis, Tenn	Foun
228	Brunswick	Jack F Reichert (52)	408	114	171	—	693	26	1	West Allis, Wisc	Marketi
348	Burlington Inds	William A Klopman (61)	365	58	119	—	542	37	6	New York, NY	Marketi
78	Burlington Northern	Richard M Bressler (52)	835	93	222	—	1,149	3	3	Wayne, Neb	Finar
126	Burroughs	W Michael Blumenthal (57)	744	14	44	163	965	3	2	Germany	Administrati
620	Cabot	Robert A Charpie (57)	517	—	–209	—	308	14	14	Cleveland, Ohio	Techni
737	California First Bnk	Yasushi Sumiya (55)	182	29	3	—	214	2	2	Japan	Bank
531	Cameron Iron Works	Myron A Wright (72)	362	13	—	—	375	6	6	Blair, Okla	Administrati
421	Campbell Soup	R Gordon McGovern (56)	448	9	5	—	462	27	2	Norristown, Pa	Marketi
363	Capital Cities Commun	Thomas S Murphy (58)	435	16	63	—	514	28	16	Brooklyn, NY	Administrati
166	Capital Holding	Thomas C Simons (54)	557	11	268	—	836	5	5	Pasadena, Cal	Insuran
246	Carnation	H Everett Olson (76)	425	114	—	123	662	51	15	Chicago, Ill	Finar
644	Carolina Pwr & Lt	Sherwood H Smith Jr (48)	245	3	41	—	289	18	3	Jacksonville, Fla	Le
369	Carter Hawley Hale	Philip M Hawley (57)	502	8	—	—	510	25	6	Portland, Ore	Retail
790	Castle & Cooke	[15]Henry B Clark Jr (67)	167	—	—	—	167	37	1	Chevy Chase, Md	Administrati
258	Caterpillar Tractor	Lee L Morgan (63)	598	13	30	—	642	37	5	Aledo, Ill	Market
306	CBI Industries	William A Pogue (55)	349	95	145	—	588	29	1	Birmingham, Ala	Sa
209	CBS	Thomas H Wyman (53)	664	9	51	—	723	3	3	St Louis, Mo	Market
574	CBT	Walter J Connolly Jr (54)	336	2	—	—	338	22	6	Boston, Mass	Bank
524	Celanese	John D Macomber (55)	390	17	–75	48	380	10	5	Rochester, NY	Administrati
581	Celeron	Gale L Galloway (53)	327	6	—	—	334	9	3	Pearsall, Tex	Operatic
326	Centel	Robert P Reuss (65)	429	9	121	—	558	10	10	Aurora, Ill	Operatic
493	Centerre Bancorp	Clarence C Barksdale (51)	299	10	—	91	401	24	5	St Louis, Mo	Bank
635	Central & South West	Durwood Chalker (59)	282	14	—	—	296	33	3	Breckenridge, Tex	Techni
603	Central Bancorp	Oliver W Birckhead (61)	220	100	—	—	320	32	11	Brooklyn, NY	Administrati
513	Central Bancshares	Harry B Brock Jr (57)	378	10	—	—	388	12	12	Fort Payne, Ala	Foun
641	Central Fidelity Bks	Carroll L Saine (49)	250	—	8	35	293	26	2	Lincolnton, NC	Bank
796	Central Ill Pub Svc	Donald G Raymer (58)	151	8	—	—	160	35	2	Jackson, Mich	Operatic
624	Central Soya	Douglas G Fleming (53)	295	9	—	—	304	29	3	Harvey, Ill	Sa
692	Centran	Wilson M Brown Jr (56)	245	12	—	—	257	4	2	Richmond, Va	Bank
350	Champion Intl	Andrew C Sigler (51)	519	18	1	—	538	26	8	Brooklyn, NY	Sa
801	Charter	Raymond K Mason (56)	71	72	6	—	149	31	20	Jacksonville, Fla	Foun
767	CharterCorp	Gordon E Wells (55)	183	6	—	—	188	31	6	Hamburg, Iowa	Bank
260	Chase Manhattan	Willard C Butcher (56)	613	23	—	—	636	36	3	Bronxville, NY	Bank
92	Chemical New York	Donald C Platten (64)	1,031	52	—	—	1,083	42	10	New York, NY	Bank
233	Chesebrough-Pond's	Ralph E Ward (62)	476	210	—	—	686	36	15	Scotch Plains, NJ	Market
548	Chrysler	Lee Iacocca (58)	366	—	—	—	366	4	3	Allentown, Pa	Operatic
405	Chubb	Henry U Harder (58)	358	—	125	—	483	34	2	New York, NY	Insuran
179	CIGNA	Robert D Kilpatrick (59)	498	62	226	—	786	1	1	Fairbanks, La	Insuran
714	Cincinnati G & E	William H Dickhoner (61)	198	—	36	—	233	42	7	Cincinnati, Ohio	Techni
437	Cincinnati Milacron	James A D Geier (57)	297	4	3	147	450	32	13	Cincinnati, Ohio	Techni
76	Citicorp	Walter B Wriston (63)	905	19	233	—	1,157	37	13	Middletown, Conn	Bank
648	Citizens & Sthrn Ga	Bennett A Brown (54)	284	3	—	—	287	28	5	Kingstree, SC	Bank

[1]For FORBES definitions and methodology see page 126.
[15] Succeeded by Ian R. Wilson, 3/21/83.

Who Gets The Most Pay

nk	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Business background
34	Citizens Fidelity	J David Grissom (44)	296	—	—	—	**296**	10	6	Portsmouth, Ohio	Legal
08	City Federal S & L	Gilbert G Roessner (65)	387	97	241	—	**724**	42	13	Irvington, NJ	Banking
17	City Investing	George T Scharffenberger (64)	1,123	18	181	766	**2,089**	17	17	Ridgewood, NJ	Operations
00	City National	Bram Goldsmith (60)	431	—	65	—	**496**	8	8	Chicago, Ill	Finance
52	Cleveland Elec Illum	Robert M Ginn (59)	257	21	8	—	**286**	34	4	Detroit, Mich	Technical
07	Clorox	Calvin S Hatch (62)	368	23	—	—	**390**	11	2	Salt Lake City, Utah	Sales
33	Coastal Corp	Oscar S Wyatt Jr (58)	500	1	—	—	**501**	27	27	Beaumont, Tex	Founder
73	Coca-Cola	Roberto C Goizueta (52)	1,075	27	75	—	**1,178**	28	2	Cuba	Technical
09	Colgate-Palmolive	Keith Crane (62)	718	34	275	—	**1,027**	46	4	New Zealand	Marketing
14	Colonial Penn Group	John J MacWilliams (54)	425	22	267	—	**714**	14	13	Syracuse, NY	Administration
57	Colorado Natl Bnkshs	Bruce M Rockwell (60)	183	14	—	3	**200**	30	7	Denver, Colo	Banking
19	Colt Industries	George A Strichman (66)	394	178	—	—	**572**	20	20	Schenectady, NY	Administration
15	Columbia Gas System	W Frederick Laird (63)	416	27	—	—	**443**	31	2	London, Ohio	Legal
18	Combined Internatl	Patrick G Ryan (46)	396	21	32	—	**448**	20	1	Milwaukee, Wisc	Insurance
22	Combustion Eng	Arthur J Santry Jr (64)	1,105	—	250	446	**1,801**	27	20	Brookline, Mass	Legal
17	Comerica	Donald R Mandich (57)	372	14	—	—	**386**	32	2	Milwaukee, Wisc	Banking
33	Commerce Bancshrs	James M Kemper Jr (61)	165	8	—	—	**173**	36	16	Kansas City, Mo	Banking
01	Commerce Clearing	Richard T Merrill (55)	234	22	—	—	**257**	30	3	Chicago, Ill	Administration
25	Commerce Union	William F Earthman (57)	216	3	10	—	**228**	29	11	Nashville, Tenn	Finance
57	Commonwlth Edison	James J O'Connor (46)	266	8	—	—	**274**	19	3	Chicago, Ill	Administration
75	Comsat	Joseph V Charyk (62)	402	12	—	—	**414**	20	13	Canmore, Can	Administration
56	Computervision	James R Berrett (43)	300*	150	64	—	**513**	1	1	Greenwood, Wisc	Technical
37	ConAgra	Charles M Harper (55)	768	325	378	—	**1,470**	8	7	Lansing, Mich	Administration
78	Consolidated Edison	Arthur Hauspurg (58)	373	38	—	—	**411**	14	1	New York, NY	Technical
57	Consolidated Foods	John H Bryan Jr (46)	727	11	94	—	**832**	23	8	West Point, Miss	Administration
25	Consol Freightways	Raymond F O'Brien (61)	587	37	344	—	**968**	25	6	Atchison, Kan	Finance
39	Consol Natural Gas	George J Tankersley (62)	441	18	39	—	**498**	16	4	Ruston, La	Operations
57	Consumers Power	John D Selby (61)	332	—	16	—	**348**	8	5	Odebolt, Iowa	Technical
17	Continental Bancorp	Roy T Peraino (55)	366	—	—	—	**366**	25	13	Philadelphia, Pa	Finance
12	Continental Corp	John P Mascotte (44)	364	9	16	—	**388**	2	1	Fort Wayne, Ind	Insurance
03	Continental Group	S Bruce Smart Jr (60)	500	1	22	79	**603**	30	2	New York, NY	Marketing
39	Continental Illinois	Roger E Anderson (61)	499	143	38	—	**680**	36	10	Chicago, Ill	Banking
51	Continental Telecom	[16]Charles Wohlstetter (73)	489	60	85	—	**634**	22	11	New York, NY	Finance
31	Control Data	William C Norris (71)	553	1	—	—	**554**	25	25	Red Cloud, Neb	Founder
53	Convergent Technolgs	Allen H Michels (42)	191	1	—	—	**192**	3	2	Chicago, Ill	Founder
21	Cooper Industries	Robert Cizik (52)	576	22	–293	1,509	**1,814**	21	8	Scranton, Pa	Finance
19	Corning Glass Works	[17]Amory Houghton Jr (56)	407	15	18	—	**440**	31	19	Corning, NY	Operations
77	Cox Communications	[18]Clifford M Kirtland Jr (59)	338	—	—	—	**338**	19	9	Buffalo, NY	Finance
27	CPC International	James W McKee Jr (60)	560	12	–101	87	**558**	36	10	Pittsburgh, Pa	Finance
06	Crane	Thomas M Evans (72)	252	—	—	—	**252**	24	24	Pittsburgh, Pa	Finance
10	Cray Research	John A Rollwagen (42)	224	—	12	—	**237**	7	2	Minneapolis, Minn	Marketing
18	Crocker National	John B M Place (57)	354	19	—	—	**373**	5	1	New York, NY	Banking
25	Crown Central Petrol	Henry A Rosenberg Jr (53)	290	14	—	—	**304**	30	12	Pittsburgh, Pa	Administration
72	Crown Cork & Seal	John F Connelly (78)	180	2	—	—	**182**	26	26	Philadelphia, Pa	Sales
00	Crown Zellerbach	William T Creson (53)	300	12	11	—	**323**	6	1	Lafayette, Ind	Technical
55	CSX	Hays T Watkins (57)	440	17	—	57	**514**	34	1	Fern Creek, Ky	Finance
59	Cullen/Frost Bankers	Thomas C Frost (55)	331	15	—	—	**346**	33	12	San Antonio, Tex	Banking
24	Cummins Engine	Henry B Schacht (48)	589	62	27	21	**698**	18	13	Erie, Pa	Administration
35	Dana	Gerald B Mitchell (55)	612	18	—	145	**775**	39	3	Goderich, Can	Operations
50	Dart & Kraft	John M Richman (55)	784	42	525	—	**1,352**	28	4	New York, NY	Legal

*Salary annualized.

[1]For FORBES definitions and methodology see page 126.
[16] Succeeded by James V. Napier, 5/5/83.
[17] Succeeded by James R. Houghton, 4/12/83.
[18] Succeeded by William A. Schwartz, 3/31/83.

Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Busin backgrou
101	Dayton-Hudson	William A Andres (56)	738	20	—	279	**1,036**	24	6	Fayette, Iowa	Retail
610	Dayton Power & Light	Robert E Frazer (54)	291	26	—	—	**318**	8	5	Detroit, Mich	Finar
672	Deere	Robert A Hanson (58)	269	2	—	—	**270**	33	1	Moline, Ill	Market
797	Delmarva Power & Lt	Nevius M Curtis (53)	151	3	—	—	**154**	4	1	Holyoke, Mass	Administrati
431	Delta Air Lines	David C Garrett Jr (60)	386	3	64	—	**453**	36	5	Norris, SC	Operatic
655	Deluxe Check Printers	Eugene R Olson (57)	238	47	—	—	**285**	39	5	St Paul, Minn	Market
749	Deposit Guaranty	John P Maloney (65)	171	13	20	—	**205**	14	1	San Antonio, Tex	Bank
601	Detroit Edison	Walter J McCarthy Jr (58)	322	—	—	—	**322**	19	1	New York, NY	Operatic
169	Diamond Shamrock	William H Bricker (51)	775	36	14	—	**826**	14	6	Detroit, Mich	Market
127	Diebold	Earl F Wearstler (59)	202	—	—	761	**963**	36	1	North Canton, Ohio	Market
372	Digital Equipment	Kenneth H Olsen (57)	509	—	—	—	**509**	25	25	Bridgeport, Conn	Foun
432	Walt Disney	[19]E Cardon Walker (67)	338	93	22	—	**452**	45	6	Rexburg, Ida	Market
768	Dominion Bankshares	Warner N Dalhouse (49)	183	5	—	—	**188**	27	1	Roanoke, Va	Market
593	[20]Dominion Resources	[21]T Justin Moore, Jr (58)	318	—	8	—	**326**	27	5	Richmond, Va	Le
102	Donaldson, Lufkin	Richard H Jenrette (54)	806	48	182	—	**1,036**	23	9	Raleigh, NC	Foun
46	R R Donnelley & Sons	Charles W Lake Jr (65)	541	15	630	170	**1,356**	37	19	La Porte, Ind	Product
645	Dorchester Gas	George S Rooker (64)	248	41	—	—	**289**	27	23	Memphis, Tenn	Investm
417	Dover	Gary L Roubos (46)	385	3	76	—	**465**	12	2	Denver, Colo	Operati
235	Dow Chemical	Paul F Oreffice (55)	525	78	82	—	**684**	30	5	Italy	Fina
120	Dow Jones	Warren H Phillips (57)	482	185	317	—	**984**	36	8	New York, NY	Journali
584	Dravo	[22]Robert Dickey III (65)	315	7	10	—	**332**	35	18	Pittsburgh, Pa	Sa
57	Dresser Industries	John V James (64)	403	10	864	—	**1,277**	25	13	Plains Township, Pa	Fina
147	E I du Pont	Edward G Jefferson (61)	763	119	—	—	**882**	32	2	England	Techn
633	Duke Power	William S Lee (54)	260	30	8	—	**298**	28	1	Charlotte, NC	Techn
10	Dun & Bradstreet	Harrington Drake (63)	750	75	20	1,701	**2,546**	35	8	Kansas City, Mo	Market
733	Duquesne Light	John M Arthur (60)	218	4	—	--	**222**	38	14	Pittsburgh, Pa	Operati
13	E-Systems	John W Dixon (63)	1,049	23	1,105	110	**2,288**	21	14	Lexington, Ky	Administrat
476	Eastern Air Lines	Frank Borman (55)	332	10	71	—	**413**	13	7	Gary, Ind	Techn
361	Eastern Gas & Fuel	William J Pruyn (60)	359	11	113	33	**516**	31	5	Boston, Mass	Fina
93	Eastman Kodak	Walter A Fallon (65)	986	15	31	44	**1,076**	41	11	Schenectady, NY	Product
381	Eaton	E Mandell de Windt (62)	456	25	9	12	**502**	41	13	Grt Barrington, Mass	Operati
607	Jack Eckerd	Stewart Turley (48)	307	11	—	—	**318**	16	8	Mt Sterling, Ky	Administra
52	EG&G	Bernard J O'Keefe (63)	550	3	17	778	**1,348**	35	18	Providence, RI	Techn
283	El Paso	Travis H Petty (54)	578	31	—	—	**609**	36	4	Clarksville, Tex	Administra
732	El Paso Electric	Evern R Wall (50)	176	33	14	—	**223**	26	7	Borger, Tex	Techn
83	Electronic Data Systems	Morton H Meyerson (45)	463	—	657	—	**1,120**	17	4	Ft Worth, Tex	Administra
61	Emerson Electric	Charles F Knight (47)	1,050	35	—	176	**1,261**	10	9	Lake Forest, Ill	Administra
247	Emhart	T Mitchell Ford (62)	650	9	—	—	**659**	24	13	Albany, NY	L
41	Engelhard	Irving D Isko (55)	935	20	476	—	**1,431**	26	2	New York, NY	L
172	ENSERCH	William C McCord (55)	615	28	77	89	**809**	34	12	San Antonio, Tex	Techn
329	Entex	Jackson C Hinds (61)	273	29	9	244	**555**	14	11	Brownsville, Tex	L
717	Equimark	William E Bierer (53)	228	4	—	—	**232**	14	8	Uniontown, Pa	Banl
744	Equitable Bancorp	H Grant Hathaway (55)	191	17	—	—	**209**	28	1	New York, NY	Banl
28	Esmark	Donald P Kelly (61)	839	120	485	269	**1,713**	29	5	Chicago, Ill	Fin
388	Ethyl	Floyd D Gottwald Jr (60)	474	25	—	—	**499**	40	13	Richmond, Va	Administra
300	Evans Products	Monford A Orloff (69)	596	—	—	—	**596**	25	20	Omaha, Neb	L
249	Ex-Cell-O	E Paul Casey (53)	453	180	23	—	**656**	33	1	Boston, Mass	Administra
42	Exxon	Clifton C Garvin Jr (61)	1,030	96	299	—	**1,425**	36	7	Portsmouth, Va	Techn
414	Farm House Foods	Richard Y Fisher (50)	371	14	81	—	**466**	14	14	Milwaukee, Wisc	Fou
489	Farmers Group	Richard G Lindsley (61)	405	—	—	—	**405**	32	4	Minneapolis, Minn	Insur

[1]For FORBES definitions and methodology see page 126.
[19]Succeeded by Ronald W. Miller, 2/24/83.
[20]Formerly Virginia Electric & Power.
[21]Succeeded by William W. Berry, 1/1/83.
[22]Succeeded by Thomas F. Faught, Jr., 1/1/83.

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Who Gets The Most Pay

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794	Federal Co	R Lee Taylor II (41)	160	—	—	—	**160**	17	1	Memphis, Tenn	Administrat
1	Federal Express	Frederick W Smith (38)	414	1	—	51,130	**51,544**	12	12	Marks, Miss	Foun
463	Fedl Natl Mortgage	David O Maxwell (53)	225	23	180	—	**428**	2	2	Philadelphia, Pa	Le
113	Federated Dept Stores	Howard Goldfeder (57)	608	144	73	184	**1,009**	36	2	New York, NY	Retail
343	Fidelcor	Raymond J Dempsey (48)	364	25	90	68	**547**	4	4	Yonkers, NY	Bank
711	Fidelity Union Bncp	Peter Cartmell (62)	235	1	—	—	**236**	37	3	Scotland	Bank
495	Fin Corp of America	Charles W Knapp (48)	376	—	22	—	**399**	10	8	Honolulu, Haw	Fina
747	Fin Cp Santa Barbara	David L Tilton (56)	202	5	—	—	**207**	31	17	Santa Barbara, Cal	Fina
701	Financial Federation	William J Popejoy (45)	250	—	—	—	**250**	1	1	Vallejo, Cal	Bank
234	Firestone	John J Nevin (56)	460	1	223	—	**685**	3	2	Jersey City, NJ	Market
530	First Alabama Bshs	Frank A Plummer (71)	376	—	—	—	**376**	18	12	Richland, NY	Bank
572	First American	Kenneth L Roberts (50)	289	2	49	1	**341**	7	6	Dungannon, Va	Bank
521	First & Merchants	C Coleman McGehee (58)	284	29	—	68	**381**	34	9	Franklin, Va	Bank
439	First Atlanta	Thomas R Williams (54)	386	44	17	—	**447**	10	7	Atlanta, Ga	Bank
571	First Bank System	George H Dixon (62)	344	—	—	—	**344**	6	1	Rochester, NY	Fina
5	First Boston	[23]George L Shinn (60)	2,000	74	369	1,090	**3,533**	8	8	Newark, Ohio	Investm
729	First Charter Finl	S Mark Taper (81)	225	—	—	—	**225**[24]	28	28	Poland	Four
217	First Chicago	Barry F Sullivan (52)	640	69	—	—	**710**	2	2	Bronx, NY	Bank
303	First City Bancorp	James A Elkins Jr (64)	399	20	175	—	**594**	41	20	Galveston, Tex	Bank
780	First Empire State	[25]Claude F Shuchter (60)	176	—	—	—	**176**	24	6	Chicago, Ill	Bank
75	First Executive	Fred Carr (52)	696	1	—	461	**1,158**	8	8	Los Angeles, Cal	Fina
808	First Florida Banks	[26]Chester H Ferguson (74)	8	—	—	—	**8**[27]	11	11	Americus, Ga	Le
347	First Hawaiian	John D Bellinger (60)	277	152	113	—	**542**	41	13	Honolulu, Haw	Bank
202	First Interstate Bancp	Joseph J Pinola (58)	568	18	83	76	**745**	7	5	Pittston, Pa	Bank
658	First Kentucky Natl	A Stevens Miles (53)	262	13	8	—	**284**	29	8	Louisville, Ky	Bank
654	First Maryland Bncp	J Owen Cole (54)	275	11	—	—	**285**	26	9	Rutherfordton, NC	Administrat
724	First Natl Cinc	William N Liggett (66)	230	—	—	—	**230**	35	12	Ripley, Ohio	Bank
616	First Natl State Bcp	Robert R Ferguson Jr (59)	314	—	—	—	**314**	33	10	Savannah, Ga	Bank
664	First Natl Supermkts	Richard J Bogomolny (48)	275	2	—	—	**277**	10	8	Cleveland, Ohio	Administrat
791	First New Mexico Bksh	George S Jenks (56)	159	1	4	—	**165**	33	1	Australia	Bank
668	First of America Bnk	James H Duncan (58)	273	—	—	—	**274**	33	13	Madison, Wisc	Bank
798	First Oklahoma Bncp	Charles A Vose Jr (39)	144	—	10	—	**154**	18	2	Clinton, Iowa	Bank
704	First Pennsylvania	George A Butler (55)	240	6	—	—	**246**	33	3	Westmont, NJ	Bank
722	First Security	Spencer F Eccles (48)	216	15	—	—	**230**	24	2	Ogden, Utah	Bank
594	First Tennessee Natl	Ronald A Terry (52)	299	27	—	—	**326**	26	9	Memphis, Tenn	Bank
318	First Union	C Clifford Cameron (63)	347	110	118	3	**577**	19	16	Meridian, Miss	Bank
685	First United Bancorp	Paul W Mason (62)	246	—	14	—	**261**	21	13	Wichita, Kan	Bank
676	First Virginia Banks	Thomas K Malone Jr (63)	260	5	—	—	**265**	32	4	Burlington, Vt	Bank
640	First Wisconsin	Hal C Kuehl (60)	270	23	—	—	**293**	35	5	Davenport, Iowa	Bank
324	Fischbach	Alfred R Manville (66)	562	—	—	—	**562**	11	3	Carbondale, Pa	Techn
656	Flagship Banks	Philip F Searle (58)	247	—	38	—	**285**	8	8	Kansas City, Mo	Bank
397	Fleet Financial	J Terrence Murray (43)	336	5	47	99	**487**	20	1	Woonsocket, RI	Fina
402	Fleming Cos	Richard D Harrison (60)	448	22	14	—	**485**	29	17	Salt Lake City, Utah	L
488	Flickinger	Jerry D Metcalf (45)	359	—	47	—	**406**	6	2	Hutchinson, Kan	Operati
786	Florida Natl Banks	George C Whitner (60)	169	2	—	—	**171**	25	2	Jacksonville, Fla	Bank
349	Florida Power & Lt	[28]Marshall McDonald (65)	330	15	194	—	**539**	11	11	Memphis, Tenn	Fina
739	Florida Progress	Andrew H Hines Jr (60)	205	—	9	—	**213**	31	10	Lake City, Fla	Techn
15	Fluor	J Robert Fluor (61)	1,073	22	418	733	**2,246**	37	15	Santa Ana, Cal	Techn
276	FMC	Robert H Malott (56)	605	—	15	—	**619**	30	11	Boston, Mass	Operati
446	Food Town Stores	Ralph W Ketner (62)	382	59	—	—	**442**	25	25	Rowan County, NC	Four

[1]For FORBES definitions and methodology see page 126.
[23]Succeeded by Peter T. Buchanan, 2/15/83.
[24]Figures are for year ended 12/31/81.
[25]Succeeded by Robert G. Wilmers, 4/20/83.
[26]Deceased. Succeeded by A. Bronson Thayer, 3/5/83.
[27]Director's fees only; excludes fees paid to law firm of which Mr. Ferguson was a partner.
[28]Succeeded by John J. Hudiburg, 4/1/83.

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Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Busin backgrou
440	Ford Motor	Philip Caldwell (63)	446	—	—	—	**446**	30	3	Bourneville, Ohio	Administrat
165	Foremost-McKesson	Thomas E Drohan (55)	558	16	24	239	**837**	21	5	Newton, Mass	Operati
394	Fort Howard Paper	Paul J Schierl (48)	370	99	21	—	**490**	19	8	Neenah, Wisc	L
735	Foster Wheeler	Louis E Azzato (52)	184	4	33	—	**221**	31	2	New York, NY	Techn
44	Freeport-McMoran	Paul W Douglas (56)	577	255	—	542	**1,374**	30	7	Springfield, Mass	Market
504	Fruehauf	Robert D Rowan (61)	375	18	—	—	**393**	27	9	Holland, Mich	Fina
162	Gannett	Allen H Neuharth (59)	720	45	83	—	**849**	20	10	Eureka, SD	Journal
490	GATX	James J Glasser (49)	350	4	50	—	**404**	21	4	Chicago, Ill	L
62	GEICO	John J Byrne (50)	414	118	728	—	**1,260**	7	7	Passaic, NJ	Insura
418	Gelco	N Bud Grossman (62)	375	34	37	18	**464**	26	26	Minneapolis, Minn	Foun
396	General Cinema	Richard A Smith (58)	403	22	62	—	**487**	36	36	Brookline, Mass	Administrat
19	General Dynamics	David S Lewis (65)	453	73	—	1,422	**1,947**	12	12	N Augusta, SC	Administrat
29	General Electric	John F Welch Jr (47)	975	43	—	683	**1,701**	22	2	Peabody, Mass	Techn
299	General Foods	James L Ferguson (57)	557	41	—	—	**598**	20	9	Evanston, Ill	Marke
186	General Instrument	Frank G Hickey (55)	756	16	—	—	**772**	18	8	Stevens Pt, Wisc	Marke
100	General Mills	H Brewster Atwater Jr (52)	641	43	71	293	**1,048**	25	2	Minneapolis, Minn	Marke
321	General Motors	Roger B Smith (57)	549	—	17	—	**565**	33	2	Columbus, Ohio	Fina
670	General Public Utils	William G Kuhns (61)	265	7	—	—	**272**	27	16	Milwaukee, Wisc	Fina
131	General Re	Harold J Hudson Jr (59)	484	1	461	—	**946**	27	12	Kansas City, Mo	L
196	General Signal	Nathan R Owen (64)	635	20	—	103	**758**	22	21	Burnt Hills, NY	Techn
406	Genl Tire & Rubber	Michael G O'Neil (61)	462	11	5	—	**478**	37	23	Akron, Ohio	Administra
554	Genuine Parts	Wilton Looney (64)	351	12	—	—	**363**	44	21	Vanna, Ga	Operat
485	Georgia-Pacific	[29]Robert E Flowerree (62)	350	70	–13	—	**407**	31	6	New Orleans, La	Operat
231	Getty Oil	Sidney R Petersen (52)	633	56	—	—	**689**	28	3	Oakland, Cal	Fin
245	Giant Food	Israel Cohen (70)	619	7	39	—	**665**	47	5	Israel	Fou
728	Gibraltar Financial	Herbert J Young (51)	226	—	—	—	**226**	30	14	Los Angeles, Cal	Administra
629	Gibraltar Savings	E Michael Lallinger (67)	300	—	—	—	**300**	27	19	St Louis, Mo	Fin
183	Gillette	Colman M Mockler Jr (53)	463	7	28	281	**779**	25	8	St Louis, Mo	Fin
358	Global Marine	C Russell Luigs (50)	503	19	—	—	**523**	6	6	Evansville, Ind	Techn
669	Golden West Finl	[30]Herbert M Sandler (51)	273	—	—	—	**273**	19	19	New York, NY	Fou
275	B F Goodrich	John D Ong (49)	310	5	—	304	**619**	22	3	Ulrichsville, Ohio	I
64	Goodyear	[31]Charles J Pilliod Jr (64)	496	387	107	261	**1,252**	42	9	Cuyahoga Falls, Ohio	S
175	Gould	William T Ylvisaker (59)	732	55	6	—	**794**	15	15	St Paul, Minn	Administra
134	W R Grace	J Peter Grace (70)	782	63	–261	333	**917**	46	37	Manhasset, NY	Fin
477	W W Grainger	David W Grainger (55)	366	47	—	—	**413**	33	9	Chicago, Ill	Administra
469	Great Atl & Pac Tea	James Wood (53)	400	20	—	—	**420**	3	3	England	Reta
632	Gt Northern Nekoosa	Robert Hellendale (65)	290	—	9	—	**299**	29	4	New York, NY	I
452	Gt Western Financial	James F Montgomery (48)	350	11	11	64	**436**	7	4	Topeka, Kan	Fin
281	Greyhound	John W Teets (49)	457	19	138	—	**614**	19	1	Elgin, Ill	Administra
419	Grumman	John C Bierwirth (59)	424	14	25	—	**463**	10	8	Lawrence, NY	Fin
132	GTE	Theodore F Brophy (60)	919	24	—	—	**943**	25	7	New York, NY	I
140	Gulf & Western Inds	[32]Charles G Bluhdorn (56)	895	9	—	—	**904**	27	25	Austria	Fou
225	Gulf Oil	James E Lee (61)	664	31	—	—	**696**	41	1	Kiln, Miss	Operat
683	Gulf States Utils	Paul W Murrill (48)	192	70	—	—	**262**	5	1	St Louis, Mo	Administra
33	Gulf United	E Grant Fitts (67)	1,250	51	260	—	**1,562**	15	15	Montevallo, Ala	I
89	Halliburton	John P Harbin (65)	742	106	240	—	**1,087**	34	11	Waxahachie, Tex	Fin
602	Hammermill Paper	Albert F Duval (62)	298	7	15	—	**320**	23	12	Holyoke, Mass	Mark
474	Harris Bankcorp	Charles M Bliss (61)	375	40	—	—	**415**	39	5	Evanston, Ill	Bar
212	Harris Corp	Joseph A Boyd (62)	555	—	162	—	**717**	21	5	Oscar, Ky	Tech
615	Hartford National	Robert L Newell (60)	298	8	8	—	**314**	37	7	Hartford, Conn	Bar

[1]For FORBES definitions and methodology see page 126.
[29]Succeeded by T. Marshall Hahn, Jr., 5/3/83.
[30]Office jointly held with Marion O. Sandler.
[31]Succeeded by Robert E. Mercer, 1/1/83.
[32]Deceased. Succeeded by Martin S. Davis, 2/24/83.

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Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Busine backgrou
304	G Heileman Brewing	Russell G Cleary (50)	537	57	—	—	**594**	23	12	Chippewa Falls, Wisc	Le
91	H J Heinz	Anthony J F O'Reilly (47)	740	92	251	—	**1,084**	14	3	Ireland	Le
557	Walter E Heller Intl	Franklin A Cole (57)	330	30	—	—	**360**	20	12	Park Falls, Wisc	Le
681	Helmerich & Payne	Walter H Helmerich III (60)	247	5	11	—	**263**	34	22	Tulsa, Okla	Administrati
137	Hercules	Alexander F Giacco (63)	621	60	194	35	**911**	41	5	Italy	Techni
187	Hershey Foods	William E C Dearden (60)	437	122	212	—	**772**	25	7	Philadelphia, Pa	Sa
243	Hewlett-Packard	John A Young (51)	596	2	74		**672**	24	5	Nampa, Ida	Techni
433	Hilton Hotels	Barron Hilton (55)	441	11	—	—	**452**	28	17	Dallas, Tex	Administrati
173	Holiday Inns	Michael D Rose (41)	362	404	—	40	**807**	9	2	Akron, Ohio	Operati
695	Homestake Mining	Harry M Conger (52)	237	17	—	—	**254**	7	4	Seattle, Wash	Techni
80	Honeywell	Edson W Spencer (57)	1,071	—	68	—	**1,139**	28	8	Chicago, Ill	Sa
561	George A Hormel	Richard L Knowlton (51)	350	6	—	—	**356**	34	1	Austin, Minn	Market
150	Hospital Corp of Am	Thomas F Frist Jr (45)	393	24	1	458	**876**	14	1	Nashville, Tenn	Foun
222	Household Intl	Donald C Clark (51)	617	83	—	—	**700**	28	1	Brooklyn, NY	Fina
551	Houston Industries	Don D Jordan (51)	337	28	—	—	**364**	26	6	Corpus Christi, Tex	Le
550	Houston Natural Gas	M D Matthews (59)	354	—	11	—	**365**	19	1	Mt Vernon, Ark	Fina
270	Hughes Tool	James R Lesch (61)	438	48	140	—	**626**	36	3	Apache, Okla	Administrat
32	Humana	David A Jones (51)	672	67	19	855	**1,612**	21	21	Louisville, Ky	Foun
460	Huntington Bancshs	Frank Wobst (49)	363	30	8	28	**428**	8	2	Germany	Bank
124	E F Hutton Group	Robert Fomon (58)	925	8	36		**969**	32	12	Chicago, Ill	Investm
144	IC Industries	William B Johnson (64)	647	75	169	—	**891**	17	17	Salisbury, Md	Le
785	Idaho Power	James E Bruce (63)	147	9	16	—	**172**	31	6	Boise, Ida	Le
715	Illinois Power	Wendell J Kelley (57)	218	9	6	—	**233**	33	16	Champaign, Ill	Techni
556	Imperial Corp of Am	Matthew J Shevlin (57)	225*	136	—	—	**361**	1	1	San Francisco, Cal	Fina
636	Indiana National	Thomas M Miller (53)	216	80	—	—	**296**	28	2	Corydon, Ind	Bank
779	Indianapolis Pwr & Lt	Zane G Todd (59)	173	1	3	—	**177**	32	7	Hanson, Ky	Operati
713	Indust Valley Bank	Joseph A Gallagher (55)	227	3	3	—	**233**	24	3	Philadelphia, Pa	Bank
360	Ingersoll-Rand	Thomas A Holmes (59)	367	99	21	31	**518**	33	2	Wilmington, Mass	Operati
712	Inland Steel	Frank W Luerssen (55)	225	—	9	—	**234**	31	1	Reading, Pa	Techni
653	Intel	Gordon E Moore (54)	285	—	—	—	**285**	14	8	San Francisco, Cal	Foun
534	Interco	John K Riedy (67)	365	8	—	—	**373**	49	2	Chicago, Ill	Operati
210	InterFirst	Elvis L Mason (49)	627	92	—	—	**719**	9	2	Vivian, La	Bank
59	IBM	John R Opel (58)	901	367	—	—	**1,267**	33	2	Kansas City, Mo	Sa
505	Intl Flavors & Frag	Henry G Walter Jr (72)	381	11	—	—	**393**	20	20	New York, NY	Le
595	Intl Harvester	Donald D Lennox (64)	297	29	—	—	**325**	3	1	Pittsburgh, Pa	Operati
180	Intl Minerals & Chem	Richard A Lenon (62)	797	58	–71		**785**	15	12	Lansing, Mich	Fina
280	Intl Multifoods	William G Phillips (63)	582	33	—	—	**615**	14	14	Cleveland, Ohio	Fina
302	International Paper	Edwin A Gee (63)	570	25	—	—	**595**	5	3	Washington, DC	Techn
79	Intl Tel & Tel	Rand V Araskog (51)	994	146	–15	14	**1,139**	16	3	Fergus Falls, Minn	Administrat
352	InterNorth	Sam F Segnar (55)	330	28	173	—	**531**	22	3	Hope, Ark	Techn
646	IntraWest Financial	[33]Theodore D Brown (61)	240	48	—	—	**288**	13	6	Denver, Colo	Bank
764	Iowa-Illinois G & E	Dean R Stichnoth (57)	180	11	—	—	**191**	32	6	Benton County, Ind	Le
188	Irving Bank	Gordon T Wallis (63)	768	—	—	—	**768**	42	12	Salt Lake City, Utah	Fina
323	IU International	John Gilray Christy (50)	521	41	—	—	**562**	11	2	Silver Creek, NY	Operati
520	Jefferson-Pilot	W Roger Soles (62)	373	9	—	—	**381**	36	15	Whiteville, NC	Investm
142	Jewel Cos	Weston R Christopherson (58)	525	246	129	—	**900**	32	3	Walum, ND	Retai
651	Jim Walter	James W Walter (60)	286	—	—	—	**286**	37	37	Lewes, Del	Foun
86	Johnson & Johnson	James E Burke (58)	759	162	189	—	**1,110**	30	6	Rutland, Vt	Marke
203	Johnson Controls	Fred L Brengel (60)	572	89	82		**743**	35	16	Hicksville, NY	S
535	Joy Manufacturing	Alexander W Calder (59)	345	4	24	—	**373**	34	1	Cleveland, Ohio	Techn

*Salary portion annualized.

[1]For FORBES definitions and methodology see page 126.
[33]Succeeded by Robert G. Boucher, 4/28/83.

NATIONAL NEWS

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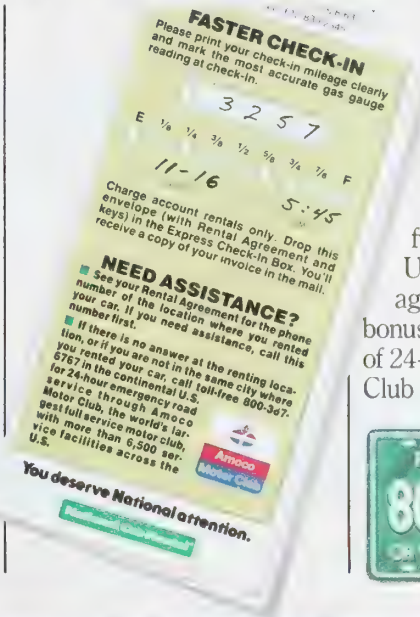

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Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Bus backgr
313	K mart	Bernard M Fauber (60)	560	22	—	—	582	41	3	Botetourt Cnty, Va	Reta
380	Kaiser Alum & Chem	Cornell C Maier (58)	495	7	—	—	502	33	10	Herreid, SD	Opera
267	Kaneb Services	Michael G Shoup (51)	525	29	73	—	627	27	1	Chicago, Ill	Fir
781	Kansas City Pwr & Lt	Arthur J Doyle (60)	173	1	—	—	175	10	3	Boston, Mass	
805	Kansas Gas & Elec	Wilson K Cadman (56)	126	2	—	—	128	32	2	Wichita, Kan	Administr
803	Kansas Power & Light	William E Wall (55)	140	—	—	—	140	8	7	Seattle, Wash	
250	Kellogg	William E Lamothe (56)	625	8	21	—	655	32	4	Brooklyn, NY	Mark
776	Kemper	Joseph E Luecke (56)	174	6	—	—	180	31	4	Philadelphia, Pa	Insu
789	Kentucky Utilities	William B Bechanan (57)	160	8	—	—	168	34	4	Hodgenville KY	Tech
404	Kerr-McGee	Dean A McGee (79)	475	9	—	—	484	46	29	Humboldt, Kan	Produ
528	Key Banks	Victor J Riley Jr (51)	353	24	—	—	377	19	9	Buffalo, NY	Fir
479	Key Pharmaceuticals	Michael Jaharis Jr (54)	380	31	—	—	411	11	11	Chicago, Ill	
67	Kidde	Fred R Sullivan (68)	1,105	140	—	—	1,245	19	19	Fort Wayne, Ind	Fir
240	Kimberly-Clark	Darwin E Smith (57)	550	—	129	—	680	25	11	Garrett, Ind	
356	Knight-Ridder News	Alvah H Chapman Jr (62)	499	5	—	24	527	22	7	Columbus, Ga	Administr
684	Koppers	Charles R Pullin (59)	252	5	4	—	261	37	1	Point Pleasant, W Va	Administr
99	Kroger	Lyle Everingham (57)	596	57	—	399	1,052	36	5	Flint, Mich	Ret
291	Lear Siegler	Robert T Campion (62)	557	47	—	—	604	25	12	Minneapolis, Minn	Fir
58	Levi Strauss	Robert T Grohman (58)	500	184	435	156	1,276	9	1	Hazelton, Pa	Administr
486	Liberty National	John W McLean (61)	232	30	144	—	406	15	15	Okmulgee, Okla	Ba
122	Eli Lilly	Richard D Wood (56)	776	20	—	181	977	33	10	Brazil, Ind	Mark
580	Limited	Leslie H Wexner (45)	318	19	—	—	336	19	19	Dayton, Ohio	Fo
510	Lincoln First Banks	Alexander D Hargrave (63)	388	1	—	—	389	20	9	Canandaigua, NY	
526	Lincoln National	Ian M Rolland (50)	349	1	29	—	379	27	6	Ft Wayne, Ind	Insu
154	Litton Industries	Fred W O'Green (62)	824	45	—	—	869	20	1	Mason City, Iowa	Tech
155	Lockheed	Roy A Anderson (62)	617	10	23	219	868	26	5	Ripon, Cal	Fi
309	Loews	Laurence A Tisch (60)	535	52	—	—	587	23	22	Brooklyn, NY	Fi
736	Long Island Lighting	Charles R Pierce (61)	215	4	—	—	219	33	5	Bar Harbor, Me	
742	Longs Drug Stores	Robert M Long (45)	202	7	—	—	209	22	6	Oakland, Cal	Ret
376	Louisiana Land	John G Phillips (60)	360	75	70	—	506	31	11	Camden, Ark	Fi
444	Louisiana-Pacific	Harry A Merlo (58)	353	83	7	—	443	33	9	Stirling City, Cal	Mark
514	Lowe's Companies	Leonard G Herring (56)	339	6	42	—	387	27	4	Snow Hill, NC	Fi
16	LTV	[34]W Paul Thayer (63)	1,066	88	—	944	2,098	34	12	Henryetta, Okla	
430	Lubrizol	Lester E Coleman (52)	444	—	9	—	454	28	5	Akron, Ohio	Tech
391	Lucky Stores	S Donley Ritchey (49)	496	—	—	—	496	31	3	Derry Township, Pa	Opera
193	M/A-Com	Richard T DiBona (50)	173	317	272	—	761	25	1	Quincy, Mass	Tech
139	R H Macy	Edward S Finkelstein (58)	560	52	111	182	905	34	2	New Rochelle, NY	Ret
464	Malone & Hyde	Joseph R Hyde III (40)	395	—	33	—	428	18	14	Memphis, Tenn	Administ
148	Mfrs Hanover	John F McGillicuddy (52)	752	20	105	—	877	24	4	Harrison, NY	
707	Manufacturers Natl	Dean E Richardson (55)	238	3	—	—	241	29	10	West Branch, Mich	Ba
424	Manville	John A McKinney (59)	444	10	8	—	461	31	6	Huntsville, Tex	
536	MAPCO	Willis H Thompson Jr (49)	350	5	18	—	373	6	3	Minneapolis, Minn	Oper
721	Marine	George R Slater (59)	224	7	—	—	230	7	5	Indianapolis, Ind	Ba
407	Marine Midland Bks	[35]Edward W Duffy (57)	425	53	—	—	478	30	9	Utica, NY	Ba
268	Marriott	J Willard Marriott Jr (51)	519	19	89	—	627	27	10	Washington, DC	Administ
178	Marsh & McLennan	John M Regan Jr (62)	599	40	147	—	786	37	10	Minneapolis, Minn	Insu
501	Marshall & Ilsley	John A Puelicher (62)	210	5	181	—	397	37	25	Milwaukee, Wisc	Ba
97	Martin Marietta	Thomas G Pownall (61)	583	6	76	387	1,053	20	1	Cumberland, MD	Mark
586	Mary Kay Cosmetics	Richard R Rogers (40)	300	30	—	—	330	19	15	Houston, Tex	Fo
687	Maryland National	Robert D H Harvey (62)	255	—	1	4	260	36	17	Baltimore, Md	Fi

[1]For FORBES definitions and methodology see page 126.
[34]Succeeded by Raymond A. Hay, 1/11/83.
[35]Succeeded by John R. Petty, 4/20/83.

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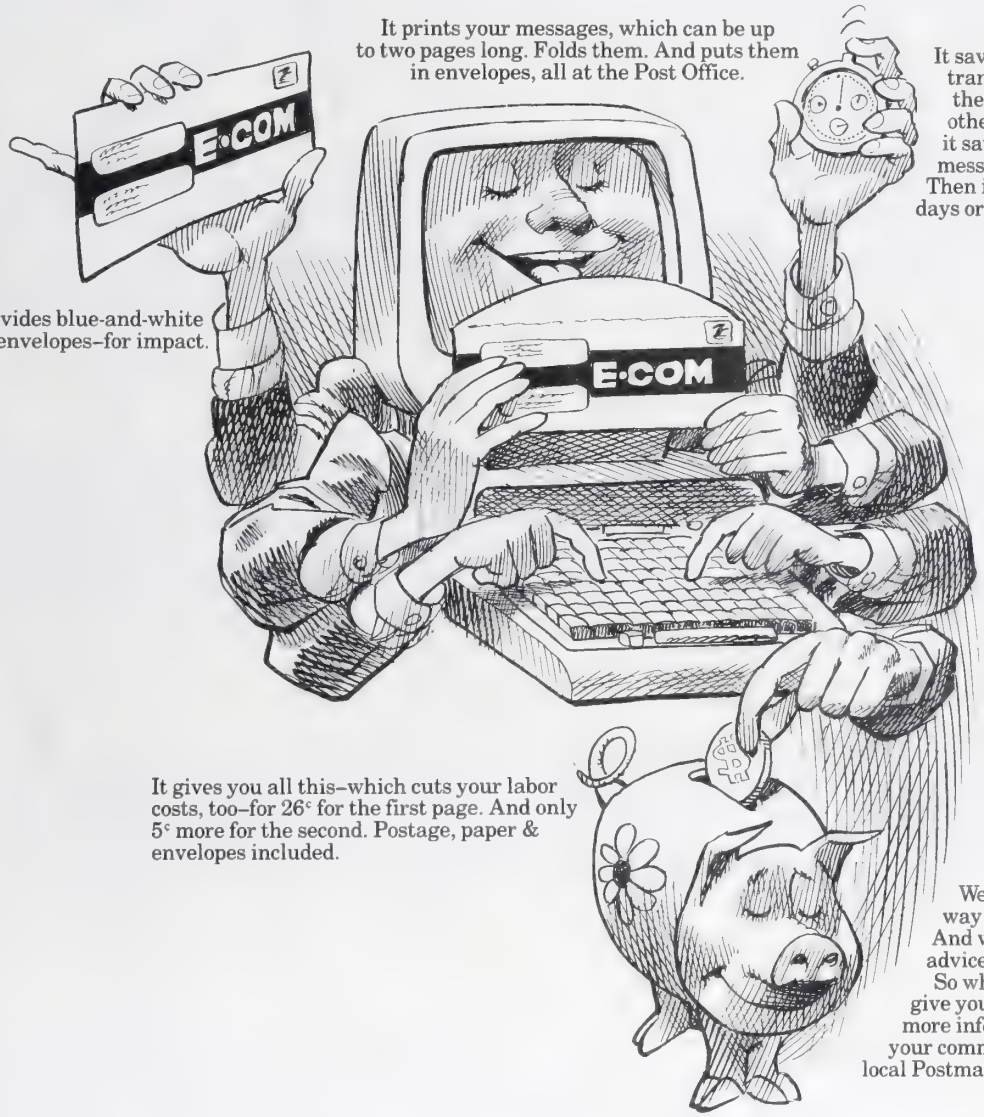

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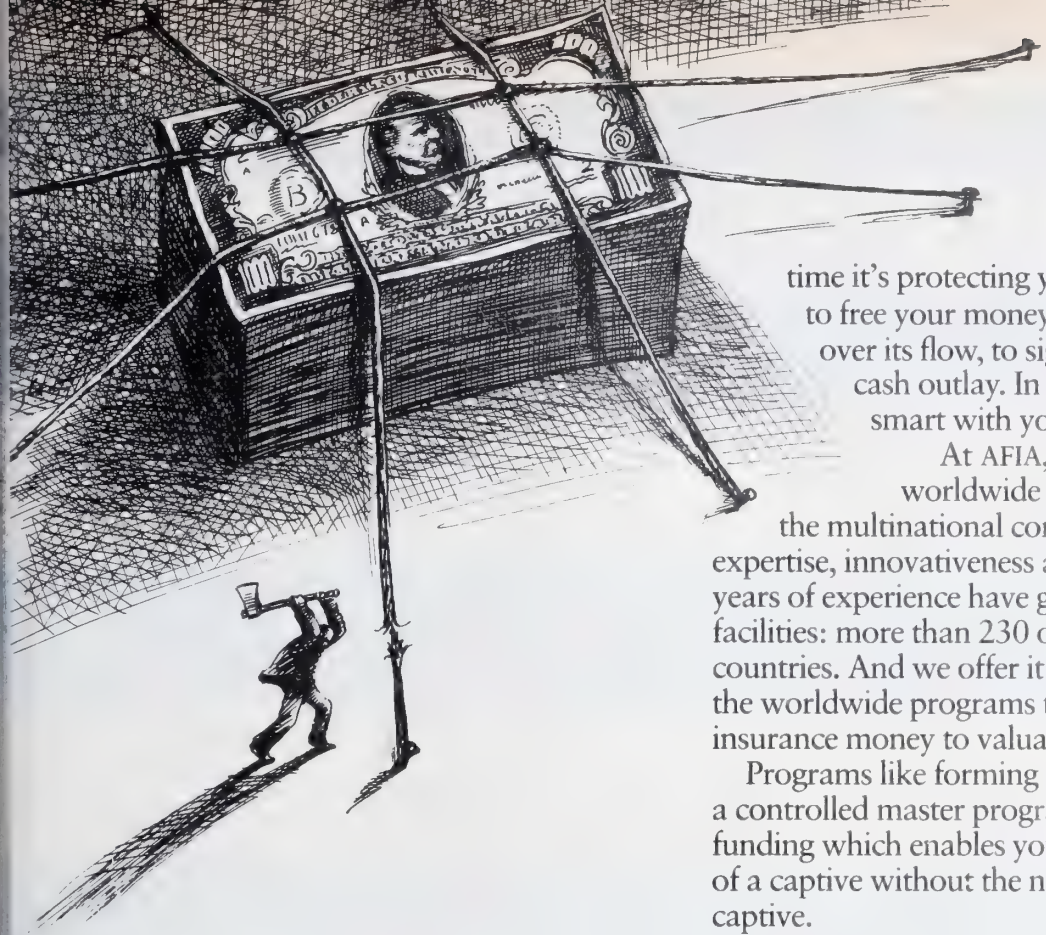
Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Busin backgrou
253	Masco	Richard A Manoogian (46)	625	15	11	—	**651**	25	15	Long Branch, NJ	Administrat
545	Mattel	Arthur S Spear (62)	334	34	—	—	**368**	18	8	Providence, RI	Operati
133	May Dept Stores	David C Farrell (50)	650	141	151	—	**942**	27	4	Chicago, Ill	Retail
434	MCA	Lew R Wasserman (70)	400	52	—	—	**452**	46	36	Cleveland, Ohio	Sa
344	McDonald's	Fred L Turner (50)	495	2	45	—	**543**	27	9	Des Moines, Iowa	Retail
362	McDonnell Douglas	Sanford N McDonnell (60)	458	37	21	—	**515**	34	11	Little Rock, Ark	Techn
174	McGraw-Edison	Edward J Williams (60)	484	136	182	—	**803**	11	10	St Louis, Mo	Fina
229	McGraw-Hill	[36]Harold W McGraw Jr (65)	468	49	175	—	**692**	36	8	New York, NY	Operati
425	MCI Communications	William G McGowan (55)	416	40	5	—	**461**	14	14	Ashley, Pa	Foun
588	Mead	Burnell R Roberts (56)	325	4	—	—	**329**	17	1	Lafayette Cnty, Wisc	Fina
562	Medtronic	Dale R Olseth (52)	293	36	26	—	**354**	7	7	St James, Minn	Administrat
298	Mellon National	J David Barnes (54)	363	68	167	—	**598**	27	2	Oil City, Pa	Bank
206	Melville	Francis C Rooney Jr (61)	542	18	168	—	**728**	30	19	N Brookfield, Mass	Retail
500	Mercantile Bancorp	Donald E Lasater (57)	378	4	16	—	**397**	24	12	St Louis, Mo	Le
288	Mercantile Stores	Leon F Winbigler (57)	568	—	37	—	**605**	34	8	Brookfield, Mo	Retail
220	Mercantile Texas	Gene H Bishop (53)	672	—	30	—	**701**	8	8	Forest, Miss	Bank
771	Merchants National	Otto N Frenzel III (52)	180	2	—	—	**182**	28	10	Indianapolis, Ind	Bank
285	Merck	John J Horan (62)	515	1	91	—	**607**	31	7	New York, NY	Le
39	Merrill Lynch	Roger E Birk (52)	1,194	28	238	—	**1,461**	28	2	St Cloud, Minn	Fina
153	Mesa Petroleum	T Boone Pickens Jr (55)	475	394	—	—	**869**	26	26	Holdenville, Okla	Foun
123	Metromedia	John W Kluge (68)	962	12	—	—	**974**	24	24	Germany	Market
599	Michigan National	Stanford C Stoddard (52)	301	20	3	—	**324**	28	11	Salt Lake City, Utah	Bank
428	MidCon	Orval C Davis (63)	417	—	40	—	**457**	36	5	Roseclare, Ill	Techn
541	Middle South Utils	Floyd W Lewis (57)	359	12	—	—	**371**	33	11	Lincoln County, Miss	Le
340	Midlantic Banks	Robert Van Buren (58)	434	42	73	—	**549**	12	6	Plainfield, NJ	Bank
232	Minn Mining & Mfg	Lewis W Lehr (62)	560	2	123	—	**686**	36	4	Elgin, Neb	Techn
748	Minnesota Power	Jack F Rowe (56)	199	—	8	—	**206**	32	4	Sebeka, Minn	Techn
163	Mission Insurance	E Richard DeRosa (60)	387	—	20	441	**847**	24	18	Oakland, Cal	Insura
400	Mitchell Energy & Dev	George P Mitchell (64)	443	43	—	—	**486**	37	24	Galveston, Tex	Foun
43	Mobil	Rawleigh Warner Jr (62)	1,388	34		—	**1,422**	29	13	Chicago, Ill	Fina
34	Monsanto	John W Hanley (61)	804	22	20	681	**1,527**	10	10	Parkersburg, W Va	Market
782	Montana Power	[37]Joseph A McElwain (63)	168	6	—	—	**174**	29	8	Deer Lodge, Mont	Le
619	Moore Financial	Thomas C Frye (64)	309	—	—	—	**309**	45	13	Ontario, Ore	Bank
157	J P Morgan	Lewis T Preston (56)	794	70	—	—	**863**	31	3	New York, NY	Bank
447	Morrison-Knudsen	William H McMurren (55)	441	—	—	—	**441**	28	11	Ontario, Ore	Operati
236	Morton Thiokol	Charles S Locke (54)	618	1	64	—	**684**	7	3	Laurel, Miss	Fina
332	Motorola	Robert W Galvin (60)	500	54		—	**554**	43	23	Marshfield, Wisc	Administrat
793	Mountain Fuel Supply	R D Cash (41)	154	—	8	—	**162**	7	1	Shamrock, Tex	Techn
453	Murphy Oil	Charles H Murphy Jr (63)	338	—	98	—	**436**	33	33	El Dorado, Ark	Foun
66	Nabisco Brands	Robert M Schaeberle (60)	836	20	332	58	**1,246**	36	9	Newark, NJ	Fina
784	Nalco Chemical	Worley H Clark Jr (51)	161	11	—	—	**172**	23	1	Richmond, Va	Techn
703	Nash Finch	Harold B Finch Jr (56)	192	8	49	—	**249**	27	1	Grand Forest, ND	Techn
775	Natl Bancshares Texas	Richard W Calvert (52)	175	5	—	—	**180**	20	1	Cambridge, Mass	Bank
377	National Can	Frank W Considine (61)	417	33	19	34	**503**	21	10	Chicago, Ill	S
516	Natl Central Financl	Wilson D McElhinny (53)	320	55	12	—	**386**	19	8	Detroit, Mich	Bank
482	National City	Julien L McCall (62)	409	—	—	—	**409**	11	2	Florence, SC	Bank
149	National Distillers	Drummond C Bell (67)	535	—	342	—	**877**	26	12	Baltimore, Md	Fina
6	Natl Medical Entrprs	Richard K Eamer (55)	675	117	—	2,652	**3,445**	14	14	Long Beach, Cal	Foun
754	Natl Semiconductor	Charles E Sporck (55)	192	5	6	—	**203**	16	16	Saranac Lake, NY	Produc
578	National Svc Inds	Erwin Zaban (61)	332	—	5	—	**337**	46	10	Atlanta, Ga	Administra

[1]For FORBES definitions and methodology see page 126.
[36]Succeeded by Joseph L. Dionne, 4/26/83.
[37]Succeeded by W. Paul Schmechel, 5/3/83.



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Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contingent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Busin background
568	National Steel	Howard M Love (53)	330	9	8	—	346	27	3	Pittsburgh, Pa	Operati
499	Nationwide	John E Fisher (53)	364	34	—	—	398	32	1	Portsmouth, Ohio	Insura
272	Natomas	Dorman L Commons (65)	410	46	—	166	622	10	9	Denair, Cal	Fina
457	NBD Bancorp	Charles T Fisher III (53)	429	3	—	—	431	24	1	Detroit, Mich	Bank
333	NCNB	Thomas I Storrs (64)	480	18	—	56	554	22	9	Nashville, Tenn	Bank
152	NCR	[38]William S Anderson (64)	679	5	188	—	872	37	9	China	Marke
700	New England Electric	Guy W Nichols (57)	238	13	—	—	251	35	11	Colchester, Vt	Administra
777	N Y State Elec & Gas	[39]Charles F Kennedy (68)	172	8	—	—	179	9	6	Elmira, NY	Techn
82	New York Times	Arthur O Sulzberger (57)	698	—	432	—	1,130	29	20	New York, NY	Journal
470	Newmont Mining	Plato Malozemoff (73)	417	3	—	—	419	37	29	Russia	Administra
706	Niagara Mohawk Pwr	John G Haehl Jr (60)	231	3	7	—	241	21	10	Brooklyn, NY	Fina
341	NICOR	Clarence J Gauthier (61)	342	168	37	—	547	37	12	Houghton, Mich	Techn
103	A C Nielsen	Arthur C Nielsen Jr (64)	985	50	—	—	1,036	37	7	Chicago, Ill	Marke
661	NIKE	Philip H Knight (45)	257	25	—	—	282	19	19	Portland, Ore	Fou
189	NL Industries	Theodore C Rogers (49)	525	55	186	—	766	3	1	Lorain, Ohio	Operat
693	Noble Affiliates	Roy Butler (57)	234	22	—	—	256	27	3	Rising Star, Tex	Operat
301	Norfolk Southern	Robert B Claytor (61)	570	15	10	—	596	31	1	Roanoke, Va	L
379	Norstar Bancorp	Peter D Kiernan (59)	366	107	29	—	502	9	9	Albany, NY	Insur
359	North Amer Philips	Cees Bruynes (50)	470	3	46	—	519	8	1	Netherlands	Marke
627	Northeast Utilities	[40]Lelan F Sillin Jr (65)	300	—	1	—	301	15	13	Tampa, Fla	L
729	No Indiana Pub Svc	Edmund A Schroer (55)	225	—	—	—	225	6	6	Hammond, Ind	I
617	No States Power	Donald W McCarthy (61)	310	3	—	—	313	35	6	Minneapolis, Minn	Operat
364	Northern Trust	Philip W K Sweet Jr (55)	350	102	61	—	514	29	2	Mount Vernon, NY	Ban
9	Northrop	Thomas V Jones (62)	1,181	352	1,378	—	2,911	29	23	Pomona, Cal	Administra
573	Northwest Airlines	M Joseph Lapensky (64)	340	—	—	—	340	38	4	Minneapolis, Minn	Fin
177	Northwest Energy	John G McMillian (56)	696	90	2	—	788	10	9	Orange City, Tex	Techn
168	Northwest Industries	Ben W Heineman (69)	807	19	—	—	826	27	27	Wausau, Wisc	Fou
660	Northwestern Finl	Ben T Craig (50)	273	10	—	—	283	5	5	Gastonia, NC	Ban
351	Norton	Donald R Melville (56)	412	15	—	108	534	16	3	England	Mark
8	Norton Simon	David J Mahoney (60)	888	352	611	1,145	2,996	16	13	New York, NY	Mark
570	Norwest	John W Morrison (61)	336	—	11	—	346	6	1	Minneapolis, Minn	Administra
118	Occidental Petroleum	Armand Hammer (85)	721	110	158	—	990	25	25	New York, NY	Fin
51	Ogden	Ralph E Ablon (67)	1,125	226	—	—	1,351	28	21	Tupelo, Miss	Administr
677	Ohio Casualty	John G Sloneker (61)	222	21	22	—	264	35	4	Hamilton, Ohio	Insur
750	Ohio Edison	Justin T Rogers Jr (53)	205	—	—	—	205	24	3	Sandusky, Ohio	
752	Oklahoma Gas & Elec	James G Harlow Jr (49)	193	11	—	—	204	22	7	Oklahoma City, Okla	Fir
650	Old Kent Financial	John C Canepa (52)	215	31	41	—	287	13	1	Newburyport, Mass	Ban
649	Old Stone	Theodore W Barnes (52)	259	28	—	—	287	35	7	Providence, RI	Ban
265	Olin	John M Henske (60)	538	56	—	34	628	13	5	Omaha, Neb	Opera
773	Oneok	J E Tyree (61)	170	11	—	—	181	34	1	Sperry, Okla	Tech
543	Overseas Shipholding	Morton P Hyman (47)	369	—	—	—	369	13	11	New York, NY	
483	Owens-Corning Fbrgls	William W Boeschenstein (57)	395	1	12	—	408	32	10	Chicago, Ill	Mark
197	Owens-Illinois	Edwin D Dodd (64)	521	391	–159	—	754	36	10	Point Pleasant, W Va	Produ
374	PACCAR	Charles M Pigott (54)	493	—	13	—	506	27	15	Seattle, Wash	Administr
552	Pacific Gas & Elec	Frederick W Mielke Jr (62)	349	15	—	—	364	32	4	New York, NY	
181	Pacific Lighting	Paul A Miller (58)	370	20	—	392	782	34	14	San Francisco, Cal	Fir
522	Pacific Pwr & Lt	Don C Frisbee (59)	373	8	—	—	381	29	11	San Francisco, Cal	Fir
454	Pacific Resources	James F Gary (62)	391	42	—	—	433	16	16	Chicago, Ill	Opera
119	Paine Webber	Donald B Marron (48)	983	—	5	—	988	24	3	Goshen, NY	Invest
455	Pall	Abraham Krasnoff (63)	331	16	85	—	432	32	13	Newark, NJ	Fi

[1]For FORBES definitions and methodology see page 126.
[38]Succeeded by Charles E. Exley, Jr., 4/20/83.
[39]Succeeded by Wells P. Allen, Jr., 5/13/83.
[40]Succeeded by William B. Ellis, 5/1/83.

Who Gets The Most Pay

k	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Business background
	Pan Am World Airways	C Edward Acker (54)	500	9	—	—	**509**	1	1	Dallas, Tex	Administration
	Panhandle Eastern	[41]Richard L O'Shields (56)	432	3	21	17	**472**	23	13	Ozark, Ark	Production
	Parker Drilling	Robert L Parker (59)	230	3	—	—	**233**	36	29	Tulsa, Okla	Technical
	Parker-Hannifin	Patrick S Parker (53)	366	29	1	—	**396**	30	11	Cleveland, Ohio	Administration
	Parsons	William E Leonhard (68)	580	337	738	—	**1,655**	16	7	Middletown, Pa	Technical
	Payless Cashways	David Stanley (47)	331	2	–	95	**428**	3	1	Kansas City, Kan	Legal
	Penn Central	Alfred W Martinelli (55)	552	40	10	–	**602**	23	1	Hackensack, NJ	Finance
	J C Penney	Donald V Seibert (59)	837	—	29	–	**866**	35	8	Hamilton, Ohio	Retailing
	Penn Power & Light	Robert K Campbell (53)	190	—	—	—	**190**	6	4	Chicago, Ill	Technical
	Pennzoil	J Hugh Liedtke (61)	600	563	313	—	**1,476**	27	20	Tulsa, Okla	Legal
	Peoples Bancorp	Joshua Green III (47)	204	—	—	—	**204**	22	6	Seattle, Wash	Banking
	Peoples Energy	Eugene A Tracy (55)	200	—	8	—	**208**	31	1	Oak Park, Ill	Finance
	PepsiCo	Donald M Kendall (62)	458	7	178	—	**642**	36	20	Sequim, Wash	Marketing
	Perkin-Elmer	Robert H Sorensen (62)	283	—	91	—	**374**	23	5	Racine, Wisc	Technical
	Petrolane	[42]Rudolph J Munzer (65)	330	20	—	—	**350**	36	26	Minneapolis, Minn	Sales
	Pfizer	Edmund T Pratt Jr (56)	750	21	—	117	**889**	18	10	Savannah, Ga	Finance
	Phelps Dodge	George B Munroe (61)	359	—	—	—	**359**	25	13	Joliet, Ill	Legal
	PHH Group	Jerome W Geckle (54)	384	6	159	130	**680**	27	2	Baltimore, MD	Administration
	Phibro-Salomon	David Tendler (45)	1,285	—	—	—	**1,285**[43]	23	2	New York, NY	Administration
	Phila Electric	James L Everett (56)	254	3	—	—	**257**	33	5	Charlotte, NC	Technical
	[44]Philadelphia Natl	G Morris Dorrance Jr (60)	292	125	—	—	**417**	31	14	Philadelphia, Pa	Finance
	Philip Morris	George Weissman (63)	956	75	—	—	**1,031**	31	4	New York, NY	Marketing
	Phillips Petroleum	William C Douce (63)	788	31	30	—	**849**	41	3	Kingman, Kan	Operations
	Pic 'n' Save	Arthur Frankel (56)	290	1	40	—	**331**	28	12	Perth Amboy, NJ	Administration
	Pillsbury	William H Spoor (60)	822	15	—	70	**907**	33	10	Pueblo, Colo	Operations
	Pioneer	K Bert Watson (58)	344	10	90	—	**444**	30	10	Ranger, Tex	Legal
	Pioneer Hi-Bred Intl	Thomas N Urban (49)	183	—	—	—	**183**	22	2	Des Moines, Iowa	Administration
	Pitney Bowes	[45]Fred T Allen (66)	615	—	119	44	**778**	44	9	Providence, RI	Operations
	Pittston	Nicholas T Camicia (67)	460	39	88	—	**587**	14	13	Welch, W Va	Operations
	PNC Financial	Merle E Gilliand (61)	480	—	32	—	**512**[46]	30	13	Pitcairn, Pa	Finance
	Pneumo	Gerard A Fulham (63)	802	—	—	425	**1,226**	23	14	Winthrop, Mass	Finance
	Pogo Producing	William C Liedtke Jr (58)	350	56	—	—	**406**	13	5	Tulsa, Okla	Operations
	Polaroid	William J McCune Jr (68)	325	—	—	—	**325**	43	3	Glens Falls, NY	Technical
	Portland Genl Elec	Robert H Short (58)	208	7	6	—	**221**	28	2	Klamath Falls, Ore	Finance
	Potlatch	Richard B Madden (54)	375	7	9	—	**391**	12	12	Orange, NJ	Finance
	Potomac Elec Power	W Reid Thompson (58)	294	17	8	—	**319**	12	12	Durham, NC	Legal
	PPG Industries	L Stanton Williams (63)	440	160	16	—	**616**	37	4	Honolulu, Haw	Finance
	Premier Industrial	Morton L Mandel (62)	230	1	—	—	**231**	43	43	Cleveland, Ohio	Founder
	Primark	Robert W Stewart (58)	261	—	9	—	**270**	12	2	Tulsa, Okla	Marketing
	Prime Computer	Joe M Henson (49)	460	27	—	—	**487**	1	1	Fort Smith, Ark	Marketing
	Procter & Gamble	John G Smale (55)	702	79	212	—	**993**	30	2	Listowel, Can	Administration
	Provident Life & Acc	H Carey Hanlin (58)	304	—	—	—	**304**	34	4	Chattanooga, Tenn	Insurance
	Public Service Colo	Richard F Walker (59)	188	7	—	—	**194**	33	4	Alliance, Neb	Technical
	Public Service Ind	Hugh A Barker (57)	195	7	—	—	**202**	24	6	Stillwater, Minn	Finance
	Public Service N H	[47]William C Tallman (63)	148	—	—	—	**148**	36	14	Newton, Mass	Technical
	Public Service N M	Jerry D Geist (49)	255	8	12	—	**275**	23	7	Raton, NM	Technical
	Pub Svc Elec & Gas	Robert I Smith (64)	285	42	6	—	**333**	42	7	Arlington, NJ	Technical
	Puget Sound Pwr & Lt	John W Ellis (54)	170	4	5	—	**179**	13	7	Seattle, Wash	Legal
	Quaker Oats	William D Smithburg (44)	440	6	—		**446**	17	1	Chicago, Ill	Marketing
	Rainier Bancorp	G Robert Truex Jr (59)	445	12	74	—	**531**	9	9	Red Bank, NJ	Banking

[1]For FORBES definitions and methodology see page 126.
[41]Succeeded by Robert D. Hunsucker, 1/1/83.
[42]Succeeded by John C. Wallace, 2/8/83.
[43]Figures are salary and bonus for year ended 12/31/81. Mr. Tendler is not one of the five most highly paid officers; current remuneration is not available.
[44]Acquired National Central Financial and name changed to CoreStates Financial.
[45]Succeeded by George B. Harvey, 1/1/83.
[46]Compensaton paid by Pittsburgh National prior to merger.
[47]Succeeded by Robert J. Harrison, 3/1/83.

Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Busi backgro
269	Ralston Purina	William P Stiritz (48)	550	76	—	—	**626**	19	1	Jasper, Ark	Marke
708	Raychem	Paul M Cook (59)	240	—	—	—	**240**	26	26	Ridgewood, NJ	Fou
393	Raymond Intl	Henry F LeMieux (56)	425	17	49	—	**491**	34	12	Greenville, Miss	Administra
198	Raytheon	Thomas L Phillips (59)	748	3	2	—	**753**	35	14	Turkey	Techn
130	RCA	Thornton F Bradshaw (65)	694	16	244	—	**955**	2	1	Washington, DC	Administra
251	Reading & Bates	John W Bates Jr (63)	358	226	70	—	**653**	37	16	Spirit Lake, Iowa	Administra
795	Republic Airlines	Daniel F May (53)	145	15	—	-	**160**	26	1	Rainier, Ore	Fina
330	Republic New York	Walter H Weiner (52)	542	12	—	—	**554**	3	3	New York, NY	L
564	Republic Steel	E Bradley Jones (55)	326	24	—	—	**350**	29	1	Cleveland, Ohio	S
219	RepublicBank	James D Berry (62)	612	50	46		**708**	33	6	Sapulpa, Okla	Ban
194	Revco D S	Sidney Dworkin (62)	302	162	267	30	**760**	27	16	Detroit, Mich	Fou
81	Revlon	Michel C Bergerac (51)	1,125	2	7	—	**1,134**	8	8	France	Administra
12	R J Reynolds Inds	J Paul Sticht (65)	908	19	212	1,194	**2,333**	10	5	Clairton, Pa	Marke
295	Reynolds Metals	David P Reynolds (68)	380	33	189	—	**602**	46	7	Bristol, Tenn	Marke
508	Richardson-Vicks	John S Scott (57)	364	25	—	1	**390**	32	7	West Orange, NJ	Marke
496	Riggs National	Joe L Allbritton (58)	398	—	—	—	**398**	2	1	D'Lo, Miss	Fina
762	[48]RIHT Financial	Henry S Woodbridge Jr (54)	191	2	—	—	**193**	28	8	Boston, Mass	Fina
523	Rite Aid	Alex Grass (55)	380	—	—	—	**380**	30	20	Scranton, Pa	Fou
373	Roadway Services	Charles F Zodrow (60)	364	114	31		**509**	24	1	Milwaukee, Wisc	Fina
592	A H Robins	E Claiborne Robins Jr (39)	289	19	18	—	**326**	14	5	Richmond, Va	Administra
792	Rochester Gas & Elec	Paul W Briggs (60)	158	5	—	—	**163**	37	2	Fairport, NY	Fina
108	Rockwell Intl	Robert Anderson (62)	977	23	30	—	**1,029**	15	9	Columbus, Neb	Techn
289	Rohm & Haas	Vincent L Gregory Jr (60)	466	10	130	—	**605**	33	12	Oil City, Pa	Fina
384	Rollins	O Wayne Rollins (71)	500	—	—	—	**500**	35	35	Ringgold, Ga	Fou
579	ROLM	M Kenneth Oshman (42)	337	—	—	—	**337**	14	14	Kansas City, Mo	Fou
106	Rowan Cos	C Robert Palmer (48)	325	—	3	707	**1,035**	30	11	Gorman, Tex	Techn
31	Ryder System	[49]Leslie O Barnes (66)	700	25	—	914	**1,639**	7	7	Canisteo, NY	Administra
435	Safeco	Roland M Trafton (63)	301	—	29	122	**452**	30	4	Los Angeles, Cal	Fina
392	Safeway Stores	Peter A Magowan (41)	475	17	—	—	**492**	15	3	New York, NY	Administra
182	St Paul Cos	Carl B Drake Jr (63)	543	—	56	183	**782**	41	10	St Paul, Minn	Insura
382	[50]St Regis	William R Haselton (58)	403	95	—	3	**501**	30	4	Glens Falls, NY	Operat
723	San Diego Gas & Elec	Thomas A Page (50)	224	7	—	—	**230**	5	1	Niagara Falls, NY	Techn
277	Santa Fe Industries	[51]John S Reed (66)	490	82	46	—	**617**	43	10	Chicago, Ill	Operat
297	Schering-Plough	Robert P Luciano (49)	518	40	41	—	**599**	4	1	New York, NY	L
527	SCM	Paul H Elicker (60)	357	6	15	—	**378**	26	11	New York, NY	Fina
266	SCOA Industries	Herbert H Schiff (66)	449	4	175	—	**627**	44	18	Columbus, Ohio	Retai
484	Scott Paper	Philip E Lippincott (47)	400	—	8	-	**407**	24	1	Camden, NJ	Operat
537	Seafirst	[52]William M Jenkins (64)	355	18		—	**373**	37	20	Sultan, Wash	Ban
14	G D Searle	Donald H Rumsfeld (50)	445	283	—	1,528	**2,255**	6	6	Chicago, Ill	Investm
74	Sears, Roebuck	Edward R Telling (64)	1,050	70	42	—	**1,162**	37	5	Danville, Ill	Retai
95	Security Pacific	Richard J Flamson III (54)	649	7	—	419	**1,075**	28	4	Los Angeles, Cal	Ban
315	SEDCO	B Gill Clements (41)	321	55	203	—	**579**	14	4	Dallas, Tex	Fin
3	Sensormatic Electrns	Ronald G Assaf (48)	250	33	8	6,995	**7,286**	16	9	Akron, Ohio	Fou
587	Service Merchandise	Raymond Zimmerman (50)	326	4	—	—	**329**	22	10	Memphis, Tenn	Administra
746	Servicemaster Inds	[53]Kenneth T Wessner (61)	150	3	54	—	**207**	28	7	Sinking Springs, Pa	Administra
576	Shared Medical Systm	R James Macaleer (49)	252	82	3	—	**338**	14	14	Elizabeth, NJ	Fou
582	Shawmut	John P LaWare (55)	283	—	50	-	**333**	4	2	Columbus, Wisc	Ban
26	Shell Oil	John F Bookout (60)	869	141	475	286	**1,771**	32	7	Shreveport, La	Techn
176	Sherwin-Williams	John G Breen (48)	677	41	9	64	**791**	4	4	Cleveland, Ohio	Operat
215	Signal Cos	Forrest N Shumway (56)	435	93	185		**712**	26	15	Skowhegan, Me	L

[1]For FORBES definitions and methodology see page 126.
[48]Formerly Hospital Trust.
[49]Succeeded by M. Anthony Burns, 1/1/83.
[50]Formerly St. Regis Paper.
[51]Succeeded by John J. Schmidt, 4/26/83.
[52]Succeeded by Richard P. Cooley, 1/1/83.
[53]Succeeded by C. William Pollard, 6/1/83.

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Honeywell

Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Busi backgro
456	Singer	Joseph B Flavin (54)	432	—	—	—	**432**	7	7	St Louis, Mo	Fin
110	Smith International	Jerry W Neely (46)	517	31	—	474	**1,021**	17	6	Torrance, Cal	Operat
204	SmithKline Beckman	Henry Wendt III (49)	577	9	21	130	**737**	28	1	Neptune City, NJ	Marke
346	Society	[54]J Maurice Struchen (62)	371	35	29	107	**542**	13	7	Cleveland, Ohio	Ban
171	SONAT	Henry C Goodrich (63)	697	6	29	81	**812**	3	2	Fayetteville, Tenn	Techn
759	So Carolina E & G	Virgil C Summer (62)	183	5	8	—	**196**	45	3	Spartanburg, SC	Operat
643	South Carolina Natl	James G Lindley (52)	258	29	3	—	**290**	4	2	Greensboro, NC	Ban
357	Southeast Banking	Charles J Zwick (56)	494	6	24	—	**523**	14	3	Plantsville, Conn	Fin
467	So Calif Edison	William R Gould (63)	397	13	11	—	**421**	35	2	Provo, Utah	Tech
436	Southern Company	Alvin W Vogtle Jr (64)	433	17	—	—	**451**	42	13	Birmingham, Ala	I
613	So New England Tel	Alfred W Van Sinderen (59)	283	7	27	—	**317**	35	15	Brooklyn, NY	Operat
395	Southern Pacific	Benjamin F Biaggini (67)	475	—	14	—	**489**	46	15	New Orleans, La	Techn
223	Southland	John P Thompson (57)	541	149	10	—	**700**	34	22	Dallas, Tex	Fin
450	Southland Royalty	Jon Brumley (44)	354	46	40	—	**439**	16	9	Pampa, Tex	Administra
596	SouthTrust	Wallace D Malone Jr (46)	293	32	—	—	**325**	24	2	Dothan, Ala	Ban
614	Southwest Airlines	Herbert D Kelleher (52)	292	2	22	—	**316**	16	1	Camden, NJ	I
492	Southwest Bancshares	John T Cater (47)	380	21	—	—	**401**	6	6	Temple, Tex	Ban
760	Southwestern Pub Svc	Berl M Springer (62)	189	5	—	—	**194**	36	1	Lakeview, Tex	Techn
448	Sperry	Gerald G Probst (59)	400	41	—	—	**441**	22	1	Ogden, Utah	Techn
230	Square D	Mitchell P Kartalia (70)	580	2	108	—	**690**	42	15	Yukon, Pa	Mark
94	Squibb	Richard M Furlaud (60)	760	13	125	178	**1,076**	27	17	New York, NY	
254	A E Staley Mfg	Donald E Nordlund (61)	469	47	135	—	**651**	27	10	Stromsburg, Neb	Administr
72	Standard Oil Calif	George M Keller (59)	620	503	81	—	**1,205**	35	2	Kansas City, Mo	Techn
158	Standard Oil Ind	John E Swearingen (64)	811	49	—	—	**860**	44	22	Columbia, SC	Produ
128	Standard Oil Ohio	Alton W Whitehouse Jr (55)	616	51	186	105	**958**	14	5	Albany, NY	
525	Stanley Works	Donald W Davis (62)	346	23	—	12	**380**	35	17	Springfield, Mass	Administr
290	State Street Boston	William S Edgerly (56)	360	12	—	233	**605**	7	7	Lewiston, Me	Fin
367	Stauffer Chemical	H Barclay Morley (54)	389	1	122	—	**513**	20	9	Sydney, Can	Techn
345	Sterling Drug	Dr W Clarke Wescoe (63)	489	53	—	—	**542**	13	9	Allentown, Pa	Techn
325	J P Stevens	Whitney Stevens (56)	414	16	131	—	**561**	35	3	Plainfield, NJ	
370	Stone & Webster	Raymond C Foster (64)	422	61	27	—	**510**	37	9	Queens, NY	Techn
199	Stop & Shop Cos	Avram J Goldberg (53)	468	2	280	—	**751**	25	4	Boston, Mass	
481	Storage Technology	Jesse I Aweida (52)	388	7	16	—	**411**	13	13	Palestine	Fou
623	Suburban Bancorp	Robert F Tardio (54)	299	5	—	—	**304**	9	9	New York, NY	Fin
806	Sumitomo Bank Cal	Teruhisa Shimizu (50)	99	9	—	—	**107**	28	1	Japan	Ban
682	[55]Sun Banks	Joel R Wells Jr (55)	250	3	10	—	**263**	24	1	Troy, Ala	
170	Sun Company	Theodore A Burtis (61)	717	43	—	60	**820**	16	4	Jamaica, NY	Techn
90	Sundstrand	Evans W Erikson (56)	729	267	90	—	**1,086**	31	3	Rockford, Ill	Techn
718	Super Food Services	Jack Twyman (49)	230	—	—	2	**232**	13	11	Pittsburgh, Pa	Administr
589	Super Valu Stores	Michael W Wright (45)	329	1	—	—	**329**	6	2	Minneapolis, Minn	
308	Superior Oil	Frederic C Ackman (52)	559	8	19	—	**587**	2	1	Oakland, Ind	Administr
399	Supermarkets General	[56]Herbert Brody (68)	474	4	9	—	**486**	27	3	Philadelphia, Pa	Fou
207	Swift Independent	John A Copeland (59)	446	6	275	—	**726**	35	2	Converse, La	Produ
546	Sysco	[57]John F Baugh (67)	295	73	—	—	**367**	37	13	Waco, Tex	Fou
604	Tampax	Edwin H Shutt (55)	290	—	20	10	**320**	2	1	St Louis, Mo	Mark
765	Tandem Computers	James G Treybig (42)	190	—	—	—	**190**	8	8	Clarendon, Tex	Fou
799	Tandon	Sirjang Lal Tandon (41)	153	—	—	—	**153**	8	8	India	Fou
322	Tandy	John V Roach (44)	500	65	—	—	**565**	16	1	Stamford, Tex	Opera
709	TECO Energy	Hugh L Culbreath (62)	220	17	—	—	**237**	26	11	Tampa, Fla	Fin
423	Tektronix	Earl Wantland (51)	223	108	—	130	**461**	28	8	Bridge, Ore	Administr
674	Tele-Communications	John C Malone (42)	256	14	—	—	**270**	10	10	Milford, Conn	Administr
159	Teledyne	Henry E Singleton (66)	850	9	—	—	**859**	22	22	Haslet, Tex	Fo
77	Tenneco	James L Ketelsen (52)	730	52	373	—	**1,155**	24	4	Davenport, Iowa	Fin

[1]For FORBES definitions and methodology see page 126.
[54]Succeeded by Gordon E. Heffern, 4/21/83.
[55]Formerly Sun Banks of Florida.
[56]Deceased. Succeeded by Leonard Lieberman, 4/7/83.
[57]Succeeded by John F. Woodhouse, 1/1/83.

Who Gets The Most Pay

Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Business background
Tesoro Petroleum	Robert V West Jr (62)	981	25	367	—	**1,372**	27	18	Kansas City, Mo	Founder
Texaco	John K McKinley (63)	678	65	611	—	**1,354**	42	2	Tuscaloosa, Ala	Technical
Texas Air	Francisco A Lorenzo (43)	268	27	180	—	**474**	11	3	New York, NY	Finance
Texas American Bshs	Lewis H Bond (61)	231	–	10	—	**242**	31	20	Ashport, Tenn	Banking
Texas Commerce Bshs	Ben F Love (58)	716	25	362	—	**1,102**	16	10	Vernon, Tex	Finance
Texas Eastern	I David Bufkin (61)	469	96	94	—	**658**	34	3	Haynesville, La	Technical
Texas Gas	Dennis R Hendrix (43)	377	23	—	—	**400**	10	5	Selmer, Tenn	Finance
Texas Instruments	Mark Shepherd Jr (60)	397	27	16	243	**682**	35	14	Dallas, Tex	Technical
Texas Oil & Gas	Forrest E Hoglund (49)	442	5	—	1,303	**1,749**	5	1	Lawrence, Kan	Operations
Texas Utilities	T Louis Austin Jr (64)	304	14	—	—	**318**	30	8	Trenton, Tenn	Production
Textron	Robert P Straetz (61)	418	44	23	—	**486**	37	3	Hillside, NJ	Sales
Third National	Charles J Kane (63)	259	12	3	—	**274**	8	7	Louisville, Ky	Banking
Thrifty Corp	Leonard H Straus (68)	285	—	10	—	**294**	37	26	New York, NY	Legal
Tidewater	John P Laborde (59)	708	5	32	2,468	**3,214**	27	27	Marksville, La	Legal
Tiger International	Wayne M Hoffman (60)	460	39	123	—	**621**	15	12	Chicago, Ill	Legal
Time Inc	J Richard Munro (52)	584	75	53	407	**1,118**	25	2	Syracuse, NY	Operations
Times Mirror	Robert F Erburu (52)	525	175		—	**700**	21	2	Ventura, Cal	Legal
Timken	William R Timken Jr (44)	291	9	—	—	**300**	20	8	Canton, Ohio	Operations
Toledo Edison	John P Williamson (61)	185	5	6	—	**196**	32	10	Cleveland, Ohio	Finance
Torchmark	Frank P Samford Jr (62)	432	51	–	—	**484**	35	16	Montgomery, Ala	Legal
Tosco	Morton M Winston (52)	520	52	123	—	**695**	19	7	New York, NY	Legal
Toys "R" Us	Charles Lazarus (59)	1,431	12	45	42,360	**43,848**	27	27	Washington, DC	Founder
Trans World	L Edwin Smart (59)	353	1	76	47	**477**	16	6	Columbus, Ohio	Legal
Transamerica	James R Harvey (48)	570	21	–	282	**872**	18	2	Los Angeles, Cal	Finance
Transco Energy	William J Bowen (61)	445	27	81	—	**552**	8	8	Sweetwater, Tex	Operations
TRANSOHIO Fincl	Warner B Bishop (64)	263	6	14	—	**283**	20	20	Lakewood, Ohio	Administration
Travelers	Edward H Budd (50)	482	15	8	79	**584**	28	2	Zanesville, Ohio	Insurance
Trust Co of Georgia	Robert Strickland (56)	239	47	68	107	**461**	34	6	Atlanta, Ga	Banking
TRW	Ruben F Mettler (59)	620	4	19	670	**1,313**	28	5	Shafter, Cal	Technical
Tucson Electric Pwr	Theodore M Welp (49)	180	24			**204**	9	7	San Francisco, Cal	Finance
Turner Construction	Walter B Shaw (63)	319	—	116	23	**458**	42	6	New York, NY	Operations
UAL	Richard J Ferris (47)	380	10	—	—	**390**	11	4	Sacramento, Cal	Administration
Union Camp	Peter J McLaughlin (54)	301	—	13	145	**459**	37	3	New York, NY	Finance
Union Carbide	Warren M Anderson (61)	731	17	—	—	**748**	38	1	Brooklyn, NY	Legal
Union Electric	Charles J Dougherty (64)	323	5	—	—	**327**	42	15	Clayton, Mo	Legal
Union Pacific	[58]James H Evans (63)	835	9	14	—	**857**	14	5	Lansing, Mich	Administration
Uniroyal	Joseph P Flannery (51)	388	30	—	—	**418**	24	3	Lowell, Mass	Marketing
United Banks of Colo	N Berne Hart (53)	219	—	31	14	**264**	29	4	Denver, Colo	Banking
United Brands	Seymour Milstein (62)	435	3	—	–	**438**	8	6	New York, NY	Operations
Utd Energy Resources	J Hugh Roff Jr (51)	509	42	79	—	**631**	9	9	Wewoka, Okla	Legal
United Illuminating	John D Fassett (57)	126	–	4	—	**131**	9	7	East Hampton, NY	Legal
United Jersey Banks	T Joseph Semrod (46)	327	57	—		**384**	2	2	Oklahoma City, Okla	Banking
United Missouri Bshs	R Crosby Kemper (56)	242	4	26	—	**272**	33	13	Kansas City, Mo	Administration
U S Bancorp	John A Elorriaga (59)	252	—	—	—	**252**	32	8	Jordan Valley, Ore	Banking
United States Gypsum	Graham J Morgan (65)	543	12	14	448	**1,018**	43	18	Aurora, Ill	Marketing
United States Shoe	Philip G Barach (53)	484	—	—	569	**1,053**	22	15	Boston, Mass	Administration
United States Steel	David M Roderick (59)	557	8	22	—	**587**	24	4	Pittsburgh, Pa	Finance
U S Tobacco	Louis F Bantle (54)	730	28	—	—	**758**	20	10	Bridgeport, Conn	Marketing
U S Trust	Daniel P Davison (58)	341	42	228	9	**620**	4	2	New York, NY	Banking
United Technologies	Harry J Gray (63)	1,100	180	201	–	**1,481**	11	10	Milledgeville, Ga	Administration
United Telecom	Paul H Henson (57)	400	24	—	7	**431**	24	16	Bennet, Neb	Technical
United Virginia Bshs	Joseph A Jennings (62)	302	2	25	—	**328**	45	6	Richmond, Va	Banking
Universal Leaf	Gordon L Crenshaw (61)	248	–	120		**369**	37	17	Richmond, Va	Sales

[1]For FORBES definitions and methodology see page 126.
[58]Succeeded by William S. Cook, 5/1/83.

Who Gets The Most Pay

Rank	Company	Chief executive (age)	Compensation ($000) salary & bonus[1]	benefits[1]	contin-gent[1]	stock gains[1]	total	Years served with co.	as CEO	Place of birth	Busi backgro
40	[59]Unocal	Fred L Hartley (66)	1,400	7	47	—	**1,455**	44	18	Vancouver, Can	Techn
518	Upjohn	Ray T Parfet Jr (60)	356	28	—	—	**385**	35	21	Port Huron, Mich	Fina
192	USAir Group	Edwin I Colodny (57)	483	11	130	138	**761**	25	7	Burlington, Vt	L
480	USF&G	Jack Moseley (52)	326	—	84	—	**411**	29	3	Birmingham, Ala	Insura
211	USLIFE	Gordon E Crosby Jr (62)	516	10	193	—	**718**	24	17	Remsen, Iowa	Marke
787	Utah Power & Light	Harry Blundell (58)	162	—	8	—	**170**	34	4	Salt Lake City, Utah	Fina
264	Valero Energy	William E Greehey (47)	483	116	—	28	**628**	19	9	Fort Dodge, Iowa	Fina
606	Valley National	[60]Roger A Lyon (56)	260	16	43	—	**319**	7	1	Phillipsburg, NJ	Bank
316	Varian Associates	Thomas D Sege (57)	458	3	—	117	**578**	20	1	Yugoslavia	Techn
549	VF	Lawrence R Pugh (46)	366	—	—	—	**366**	3	1	White Plains, NY	Marke
663	Virginia Natl Bshs	Clifford A Cutchins III (59)	268	12	—	—	**280**	35	3	Southampton Cty, Va	Bank
612	Vulcan Materials	W Houston Blount (61)	314	4	—	—	**317**	28	4	Union Springs, Ala	Operati
465	Wachovia	John G Medlin Jr (49)	369	—	31	26	**426**	24	6	Benson, NC	Bank
679	Wal-Mart Stores	Sam M Walton (65)	250	—	14	—	**264**	37	37	Kingfisher, Okla	Four
629	Waldbaum	Ira Waldbaum (54)	300	—	—	—	**300**	36	34	Brooklyn, NY	Administra
259	Walgreen	Charles R Walgreen III (47)	401	19	220	—	**640**	31	12	Chicago, Ill	Operati
282	Wang Laboratories	An Wang (63)	421	—	193	—	**614**	32	32	China	Four
4	Warner Commun	Steven J Ross (55)	2,301	96	1,284	—	**3,681**	21	21	New York, NY	Fina
143	Warner-Lambert	Ward S Hagan (63)	698	155	45	—	**898**	13	5	Sioux City, Iowa	Marke
699	Washington National	Stanley P Hutchison (59)	242	6	2	—	**251**	36	7	Joliet, Ill	L
296	Washington Post	Katharine Graham (66)	452	4	145	—	**601**	20	10	New York, NY	Administra
788	Washington Water Pwr	Wendell J Satre (64)	165	3	—	—	**168**	44	8	Post Falls, Ida	Operati
284	Waste Management	Dean L Buntrock (52)	532	75	—	—	**608**	26	14	Columbia, SD	Four
190	Wells Fargo	[61]Richard P Cooley (59)	557	36	—	173	**765**	33	16	Dallas, Tex	Fina
515	Wendy's International	Robert L Barney (46)	346	29	12	—	**387**	13	3	Ashland, Ky	Administra
271	West Point-Pepperell	Joseph L Lanier Jr (51)	372	158	93	—	**622**	26	7	Lanett, Ala	Operati
334	Western Co No Amer	John A Fanning (43)	335	167	51	—	**553**	15	2	Waterbury, Conn	Techn
720	Western Savings & Loan	Gary H Driggs (48)	194	36	—	—	**231**	21	7	Phoenix, Ariz	Bank
473	Western Union	Robert M Flanagan (53)	408	4	3	—	**415**	9	4	Springfield, Mass	Fina
24	Westinghouse Elec	Robert E Kirby (64)	898	131	14	747	**1,790**	37	8	Ames, Iowa	Techn
314	Westvaco	David L Luke III (59)	555	26	—	—	**581**	31	19	Tyrone, Pa	Fina
618	Wetterau	Ted C Wetterau (55)	296	14	—	—	**310**	31	13	St Louis, Mo	Marke
336	Weyerhaeuser	George H Weyerhaeuser (56)	541	10	—	—	**551**	33	17	Seattle, Wash	Produc
320	Whirlpool	Jack D Sparks (60)	351	1	70	148	**570**	42	1	Chicago, Ill	Marke
216	White Consolidated	Roy H Holdt (62)	530	42	139	—	**711**	41	6	Edgewood, Md	Fina
626	Whitney Holding	Patrick A Delaney (51)	275	—	28	—	**303**	29	6	New Orleans, La	Banl
191	Whittaker	Joseph F Alibrandi (54)	350	395	19	—	**763**	12	8	Boston, Mass	Administra
117	Wickes Cos	Sanford C Sigoloff (53)	965†	25	—	—	**990**	1	1	St Louis, Mo	Retai
553	Willamette Inds	William Swindells Jr (52)	340	23	—	—	**363**	29	1	Oakland, Cal	Operat
559	Williams Cos	Joseph H Williams (50)	403	30	–76	—	**358**	24	4	Tulsa, Okla	Operat
218	Wilson Foods	Kenneth J Griggy (49)	564	9	21	114	**708**	7	7	Suffield, Ohio	Marke
774	Winn-Dixie Stores	A Dano Davis (38)	169	12	—	—	**181**	15	1	New Rochelle, NY	Retai
727	Wisconsin Elec Pwr	Charles S McNeer (57)	220	6	—	—	**226**	33	7	Gilbert, W Va	Techn
769	Wisconsin Pwr & Lt	James R Underkofler (59)	179	6	—	—	**185**	41	14	Baraboo, Wisc	Fina
609	Witco Chemical	William Wishnick (58)	310	5	3	—	**318**	41	11	New York, NY	Administra
611	F W Woolworth	John W Lynn (62)	318	—	—	—	**318**	41	1	Brooklyn, NY	Operat
69	Wyman-Gordon	[62]Joseph R Carter (64)	397	12	–	807	**1,217**	26	11	Youngstown, Ohio	Operati
252	Xerox	David T Kearns (52)	592	76	–16	—	**651**	11	1	Rochester, NY	S
386	Zapata	[63]B John Mackin (65)	497	3	–	—	**500**	4	4	Dallas, Tex	L
20	Zayre	Maurice Segall (54)	983	91	—	852	**1,925**	5	5	Joliette, Can	Reta
555	Zenith Radio	Revone W Kluckman (54)	320	25	16	—	**361**	16	2	Mound City, SD	Fin
726	Zions Utah Bancorp	Roy W Simmons (67)	151	61	15	—	**227**	29	17	Portland, Ore	Banl

†CEO joined company in 1982, salary portion not annualized.

[1]For FORBES definitions and methodology see page 126.
[59]Formerly Union Oil California.
[60]Succeeded by Howard C. McCrady, 4/20/83.
[61]Succeeded by Carl E. Reichardt, 1/1/83.
[62]Succeeded by John R. Bullock, 4/20/83.
[63]Succeeded by Ronald C. Lassiter, 1/1/83.

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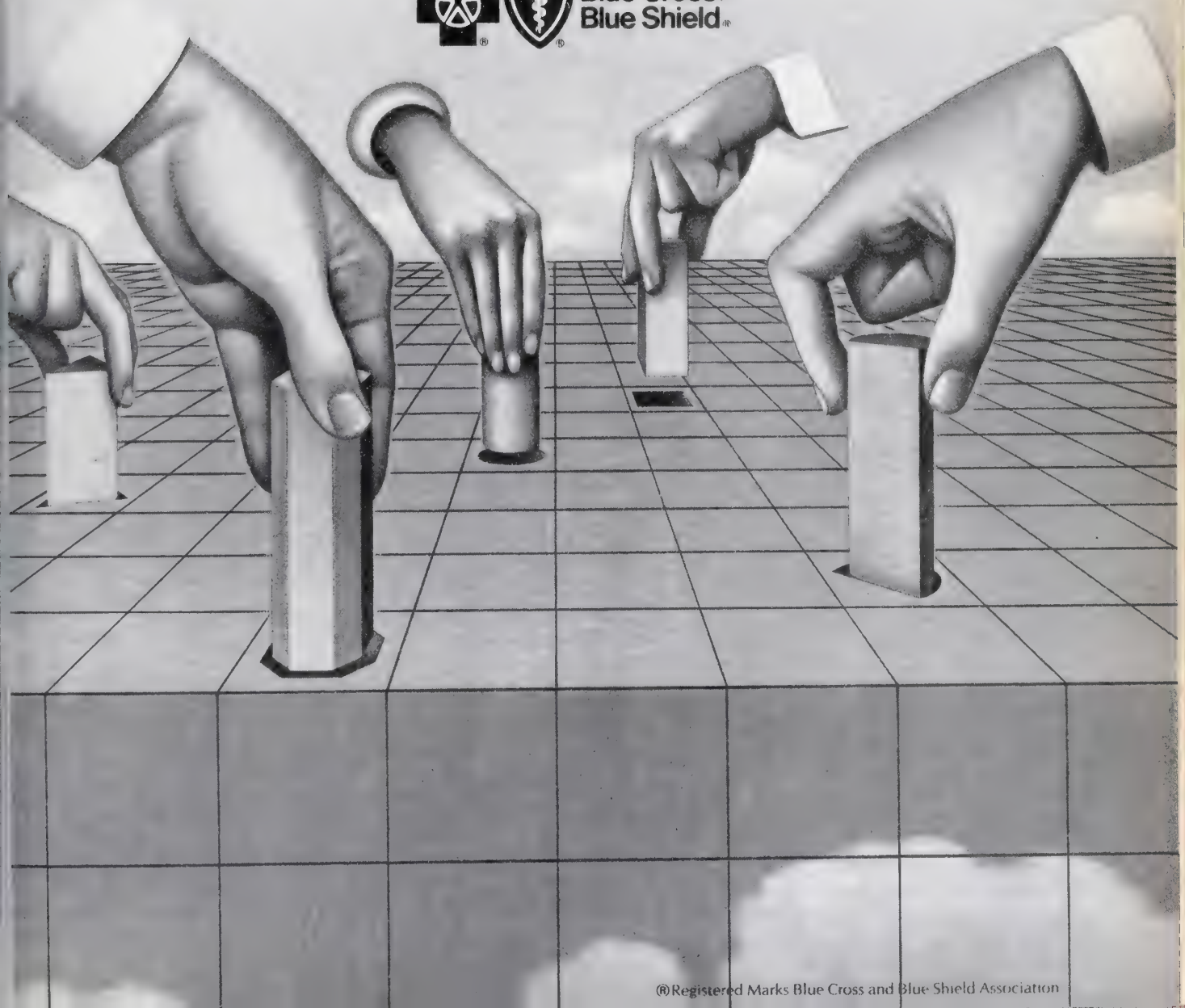

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Sperry faces an uphill fight to regain some of its onetime eminence in the computer business.

Univacuum

By John A. Byrne

GERALD PROBST, the World War II bomber pilot who heads the $5.1 billion-a-year Sperry Corp., recently landed two huge orders for his computer division. In January Sperry beat out Burroughs to win a $476 million Air Force contract, the world's largest one-shot commercial computer purchase. Then, two months later, Sperry edged out IBM for a $324 million Navy deal.

But Sperry stock, which sells at a big discount from book value, scarcely budged on the news. Why? Because The Street—and Sperry's competitors—suspect that there may not be a great deal of profit in those two big defense deals. "Our people are absolutely convinced Sperry can't make any money on that Air Force business," says a competitor. One prominent analyst agrees: "Univac discounted like hell."

Sperry naturally disagrees, but there can be little doubt that the company needed the military contracts in order to bolster its fortunes in a field where it has been steadily losing market share for years. Thus, even if the orders do not prove highly profitable, they do help keep Sperry's computer division in the high-stakes computer game. It is a field in which the company has scored few victories since winning more than a 30% share of the airline reservations business about 15 years ago.

Sperry is still a big factor in computers, which produced half of the firm's revenues in the 1982 fiscal year. It is not especially profitable, however. Sperry's computer division earned an estimated $95.4 million before taxes last year. Its profit margins of 3.5%, a third of what they had been only two years earlier, are less than one-sixth what IBM earns on the sales dollar.

Probst was named chief executive last year when J. Paul Lyet relinquished the position. He took over at something of a low point in the affairs of the sprawling company. Earnings of Sperry's New Holland agricultural equipment division, which traditionally supply 20% of profits, sank into the red last year during the farm slump. Vickers power equipment division, which contributed 11% of earnings in the previous year, also ran in the red in fiscal 1982.

Sperry's $1 billion defense and aerospace business has continued to do well, but not well enough to take up all the slack. In the fiscal year that ended this Mar. 31, Sperry earned $2.65 per share, a 47% decline, despite nonrecurring gains from the sale of its profitable British gyroscope group. This represents a return on stockholders' equity of less than 5%.

Sperry's Gerald Probst
Taking over at a low point.

Probst had been counting on a new top-of-the-line computer, the 1100/90, to help produce a 1983 turnaround. He needs that badly, since the value of new computer orders to Sperry declined last year for the first time in a decade. But Sperry recently postponed initial shipments of the new units, from June of this year to April 1984.

Better late than sorry. But the delay does cast a further shade of uncertainty on the picture and tests the patience of Sperry users who need to upgrade. Most of them can't easily switch to a competitor's product without great expense. Sperry's top-of-the-line mainframe significantly trails IBM's top machine, the 3081, in power. Meanwhile, the delay could cause Sperry "to lose its historically strong position in the 1100 series mainframes," says Jay Stevens of Dean Witter. The analyst says that this model has generated the major portion of the computer division's revenue and earnings.

All this is embarrassing for a company that virtually pioneered the computer industry in the U.S. with the 1950 acquisition of a little outfit run by a pair of University of Pennsylvania professors. However, Sperry has been losing market share, slowly but steadily, in good part because it has been less innovative and less marketing-directed than its competitors. It has yet to make a big mark in the fastest-growing part of the business, small computers.

Sperry is big in what is today the least lucrative part of the computer business, mainframes. But the minicomputer, where competitors like Digital Equipment and Data General have been going strong, has been eating away at the low end of Sperry's mainframe business. Moreover, the small-computer market has been growing 4 times as fast as the mainframe market. "Univac's current installed base is starting to erode from the bottom," says Dale Kutnick, executive director of the Yankee Group. "They are losing office automation and minicomputer sales where they have mainframes installed and, at the same time, they are getting very little new mainframe business."

Sperry's efforts to move into the lower end of the market have been plagued by bad luck. Back in 1977 its then new BC/7 small business com-

puter was beset with software and marketing problems. That same year Sperry acquired the minicomputer portion of Varian Associates, a manufacturer. But its machines don't interconnect well with Sperry mainframes and have captured only a small part of the market.

Now the company is back with its new "Sperrylink" office automation system. Sperry launched it last year, underscoring the significance by dropping "Univac" from the corporate name at the same time. Sperry's system, however, can be efficiently used only with a Sperry mainframe. One sign of trouble has cropped up, though: Just one month after initial Sperrylink deliveries, prices were cut sharply.

Standard & Poor's recently put Sperry on its Credit Watch list, a move that could raise borrowing costs significantly. One of the things that prompted that warning light is the fact that Sperry's debt-to-equity ratio, including the debt of its captive finance company, is close to 90%. Much of the borrowing is short-term paper accumulated over recent years, when Sperry helped customers arrange long-term farm equipment and computer leases at favorable terms.

Probst, who made his mark running the computer division before rising to chief executive and chairman, clearly has his work cut out for him. A decade ago he pulled a coup by acquiring RCA's computer operations division and thus greatly expanded Sperry's customer base. But the company has not been successful in following up on that move.

What now? Probst has chopped out a lot of fat, last year lowering Sperry's break-even point by $500 million. He is setting up several joint ventures to play off Sperry's mainframe strengths against other companies' low-cost manufacturing capability and more specialized technical knowhow. Probst now has in the works technical exchange agreements with Mitsubishi Electric and Northern Telecom. He has also acquired an interest in a maker of disk memory devices jointly owned by Control Data, Honeywell and France's CII.

Right now Sperry is maintaining a tight-lipped silence. Two and a half years ago, just before Probst stepped up to chief executive, FORBES noted that his new job was "a bit like getting promoted from the frying pan to the fire." That was no overstatement. If he can pull a turnaround, Probst will have proved that he is an exceptional business leader. ■

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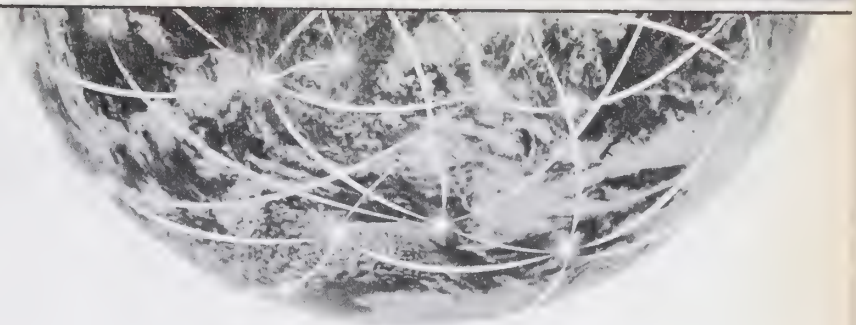

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For years, turning in record profits at Black & Decker was as easy as cutting a two-by-four with a ten-inch circular saw. Now the blade has become dull.

Splinters

By Jeff Blyskal

"Use the right tool for the right job." That bit of handyman's wisdom once worked beautifully for Black & Decker. During the Seventies do-it-yourself boom, homeowners couldn't get enough electric drills, saws, routers, sanders and grinders. B&D dominated this multibillion-dollar market with 14%-plus returns on equity, an average 19% annual sales growth and a price/earnings multiple that approached 50.

But now, Maryland-based B&D seems to be hammering nails with the butt end of a screwdriver. Basements and garages are chock-full of tools. Roughly 80% of U.S. homes now have electric drills, so most future sales must come from replacement and trade-ups. The situation is almost as bad in Europe and elsewhere overseas, where B&D now gets over half of its $1.2 billion annual revenues. "Unit growth in the power tool market is very flat," explains Chief Executive Laurence Farley.

That is an important admission. And a change from the thinking that prevailed before Farley took over from the current chairman, Francis Lucier, last January. "Prior management could not accept the fact that the company is mature," says Merrill Lynch's William Genco. "Larry Farley is more return-on-investment oriented."

Indeed he is. Farley was a force behind B&D's painful unloading of its McCulloch division, a move that brought a $94 million write-off last year. McCulloch, which makes gasoline-powered chain saws, had overexpanded to meet the stampede of would-be lumberjacks who were cutting heating bills by burning logs. Then the market choked, and B&D was struck by losses of $29 million during 1981 and 1982.

Getting rid of McCulloch, however, doesn't bring B&D out of the woods. Competition in the professional power tool market (21% of sales) is intense. The Japanese, led by Makita Electric Works, now have a solid 20% share worldwide, a block about as big as B&D's. Farley wants to meet this assault head-on, with a $256 million offensive centered on automated manufacturing, nonunion labor and reduced prices and margins.

Meanwhile, the consumer business (40% of sales) is changing. Handymen today prefer more sophisticated tools. That should benefit B&D because of its growing competitive capability in professional equipment. But foreigners are grinding away here, too. "We've noted an increase in imported power tools, generally higher priced and of higher quality," says Rick Lambert, vice president of the National Retail Hardware Association.

B&D's other lines are slow, too. Accessories are a commodity business. Outdoor products—electric garden tools and lawn mowers—are seasonal and slow-growing. Finally, demand is slowing for portable workbenches. Introduced in 1971, the Workmate line had sales of $120 million by 1979. But the recession has killed profits on these high-ticket, deferrable purchases, and B&D's Workmate factory in Ireland is closing.

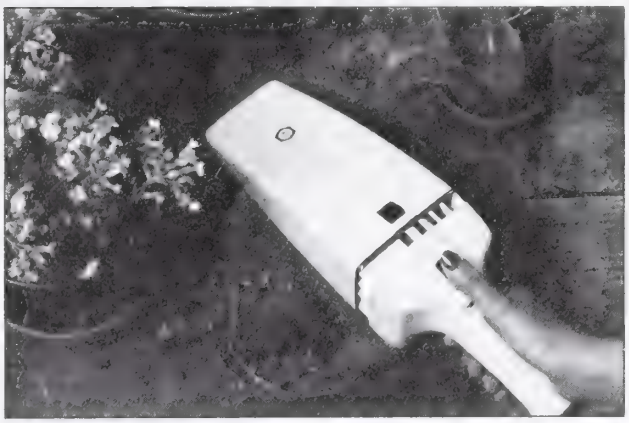
Farley's mature businesses spin off considerable profits—an estimated $35 million companywide last year. But new growth? B&D expects it to come largely from diversification into household products, now only 10% of revenues. The company hopes to use its well-known name, proven merchandising capability and a worldwide distribution system to expand its customer base beyond homeowners. "Black & Decker has a high-quality image, and that franchise can be a great strength in the household market," says Farley. "The question is, what other products?"

Thus far, B&D's household ventures have worked well. Popular items include: Dustbuster, a rechargeable hand-held vacuum cleaner; Spotliter, a high-powered flashlight; and Scrub Brush, a rotary cleaner for floor tiles and carpets. Each item uses B&D's rechargeable battery technology, which originated in the outdoor and power tool divisions.

What's next? Farley is interested in home security and energy saving devices, possibly even small robots. He is also considering blenders and toasters—if B&D can find a cost advantage.

The strategy won't be easy. "Typically, new household products have short life cycles, so B&D will have to keep coming up with new ideas," says Genco. And even innovators aren't on their own for long: Sanyo and Germany's AEG Telefunken are already making lower-priced copies of the Dustbuster. And the competing First Alert Ready Light is now promoted as burning much longer than the Spotliter.

Farley, however, seems to be making all the right moves. Rather than shopping for a showy acquisition, he wants to diversify on the basis of his company's proven strengths. That won't be easy, and B&D may never be a red-hot growth stock again. But the important thing is that Farley knows he must change. ■



Black & Decker's Dustbuster vacuum cleaner
Tooling up for growth in household products.

When U.S. creative geniuses want a new idea for a TV show, they look to Britain. The same may be true for tax accounting.

"Try it, you'll like it"

By Janet Bamford

It's a little-understood peculiarity of U.S. business that the books corporations keep for the taxmen are different from the books the same corporations present to investors. Out of this fact comes the concept of the deferred tax liability, which is the amount a company tells investors it owes in taxes. The amount it actually hands the IRS, however, is different. Since capital investments can allow a company to put off a good hunk of its taxes, the deferred tax item can amount to a tidy sum. These liabilities are shown in every annual report, and they are highly controversial.

Accountants point out that although deferred tax liabilities are supposed to represent taxes a company may owe in the future, in practice these taxes are often never paid. What happens is that as businesses grow and make more tax-credit-generating capital investments, deferred taxes mount accordingly. IBM, for example, has some $212 million in deferred taxes, General Motors has $146 million and General Electric $79 million.

Companies grumble because one effect of the current system is to put money into deferred tax accounts that really should flow through earnings and be added to stockholders' equity. And the Financial Accounting Standards Board says the current method of accounting for deferred tax liabilities doesn't square with its general concept of what liabilities are. As a result, it is working on a new way of dealing with the subject—something that experts say is among its most important projects of the decade.

It just might be possible to get a glimpse at the future. Immense deferred tax liabilities may be relatively new in the U.S., but British corporations have long had massive deferred tax accounts. "Sometimes the whole of a company's net equity was no larger than its deferred tax balance," says Michael Carey, a British partner with Ernst & Whinney. "Everyone knew that the vast bulk of those deferred tax balances would never be payable, and people began to say that the system didn't make sense because these deferred taxes being booked as liabilities were not real liabilities."

So, about five years ago, when the U.K. reached the point the U.S. is reaching today, accountants decided to change the way of dealing with taxes that may never actually be paid. Under the new British system, if a company can demonstrate with reasonable assurance that its deferred taxes will be deferred indefinitely, it doesn't have to provide for them in its financial reports.

Whether or not a deferred tax will ever be paid can be difficult to prove, but the British have allowed companies to use their capital spending budgets and conservative profit projections to provide an assurance that these bills will be deferred forever. What happens then? "Substantial chunks of deferred taxes on balance sheets were released into shareholder equity," says Carey. "And deferred tax balances came down to a much more realistic figure."

For a hint at how U.S. financial reports could change with a new method for figuring deferred taxation, look at Grand Metropolitan Ltd., the London-based brewery, liquor and food corporation that, in 1980, acquired Liggett Group. That deal carried with it $5.7 million in deferred taxes that showed up on Liggett's U.S. books. But Grand Met on consolidation got to put nearly all of this amount into shareholders' equity. According to British rules, "It wasn't foreseeable that Liggett would have to pay any of that tax to the U.S. government," says Robert Mitchell, Grand Met's controller.

Naturally, this is a less conservative system than one that assumes all deferred taxes will have to be paid. And under it some companies may not report deferred taxes that eventually turn into real liabilities. Nonetheless, the U.K. approach is still clearly more accurate than the current U.S. treatment, which soberly maintains that every last cent of these taxes will eventually be paid.

The result, of course, is that under British rules Grand Met and Liggett look like far healthier companies than they would if they were based in the U.S.

Depressing. First *Masterpiece Theatre*, and now this. ■

Factories don't vote

The Constitution mandates equal treatment under the law, but you would think many local tax collectors don't know that. In most parts of the country they assess business and industrial property at a higher percentage of market value than residential property. Why? "Homeowners vote and factories don't," says Wayne Tenenbaum, who advises businesses on getting their tax bills reduced.

He is a partner in Tenenbaum-Hill Associates, Inc. of Kansas City, Mo., one of the largest of a growing number of consultants who help get business and industrial property taxed more equitably. That looks like a simple enough job. In Illinois, for example, the law requires all property to be assessed at 33⅓% of market value. But Cook County assesses single-family residences at 16% and commercial and industrial buildings at 40%. That averages out to 33⅓%, and it is legal despite the discrimination.

In fact, Cook County tax collectors, as well as those in 15 other states, formally classify property by use in order to make sure businesses get a higher valuation than residences. Inequities can also be unintentional, of course. Texas is now changing from a system in which there are as many as five different kinds of assessors—city, county, school, hospital and sewer. Taxpayers would sometimes go comparison shopping to find the most favorable rates.

What do you do when your plant is assessed at 40% of market value while houses around it are at 20%? Getting better treatment, explains Ken Hill, Tenenbaum's partner, can be tricky, even when assessments are supposed to be equal. For example, Carnation Co. had a plant in Jacksonville, Ill. that was assessed at double what it should have been. But Carnation is a visible member of the community. Its employees serve on local civic boards and wouldn't have been sympathetic to any squeeze on municipal budgets—particularly if the difference had to be made by individual taxpayers, many of whom are Carnation employees.

So instead of pressing for the full 50% reduction, Carnation accepted a 24% cut. "The company turned out to be a hero instead of a villain by not insisting on all its rights," says Hill. More often than not, he explains, corporations find it advantageous to exhibit this corporate good citizenship.

For cutting clients' tax bills, Tenenbaum-Hill operates on a contingency

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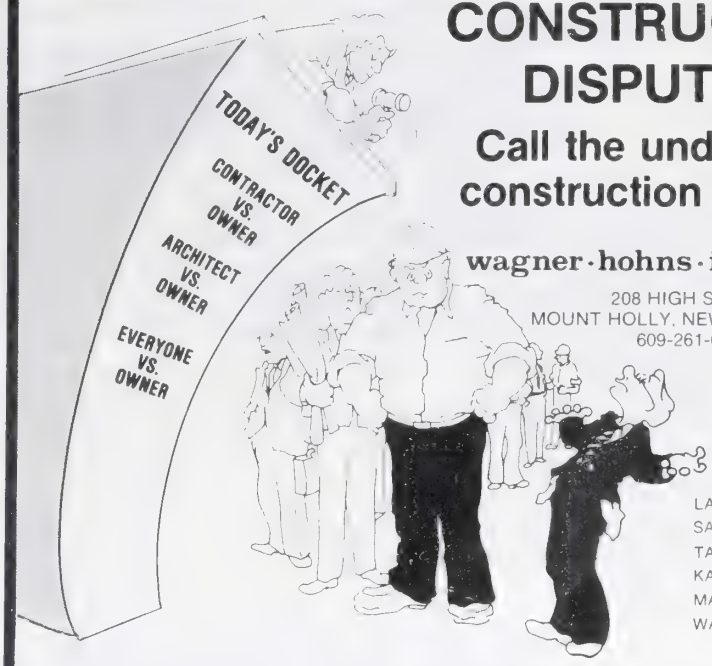

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PENTHOUSE doesn't charge 10% EXTRA, or more, for bleed like Playboy, Time, Newsweek, or Sports Illustrated.

PENTHOUSE readers spend more reading time per page with their magazine than the readers of Playboy do. And 88% read PENTHOUSE at home.

PENTHOUSE has more primary readers who "plunk" down full price at the newsstand every month than Playboy, Time, Newsweek, and Sports Illustrated *combined.*

Well over one third of PENTHOUSE readers say they are influenced to try the products that appear in PENTHOUSE.

That's why PENTHOUSE is up 10%.

PENTHOUSE

WHY FIGHT IT!

Sources: SRDS, MRI Fall 1982, ABC 12/82, Yankelovich 1981

basis and gets a healthy fee, usually equal to 50% of the first two years' reduction. "Of course, we only take on cases where we think a savings can be achieved," says Hill. "As a rule, we won't look for a new job where the tax bill is less than $100,000 a year."

Some tax discrimination against businesses is more subtle than unfair valuations. Assessors may insist that "soft" costs, such as architects' fees, be added to the market value of buildings. Or mothballed facilities may be taxed as if they were still running full blast. For example, Geo Space, Inc. bought an auto manufacturing plant in Dallas that Ford had closed down in the mid-1970s. Tenenbaum-Hill convinced local officials to reduce their assessment by 61%, because the facility's new use was as a warehouse. Geo Space saved more than $200,000 yearly in taxes.

"Property tax is the only subjective tax in this country," says Hill. "So it's relatively easy to tax a business facility at a higher rate than a residence."

What jurisdictions give business the best tax treatment? Surprise. One of them is Washington, D.C. It reassesses all property once a year. Since homes change hands more frequently than businesses, they wind up on the books at proportionately higher market values.

Much the same thing happens in California. After Proposition 13, the legislature mandated full 1975 market value assessments, with 2% annual increases. It also provided for reassessment every time property changes hands—a provision that maximizes the value of high-turnover residential real estate.

Business and industry, on the other hand, pay the biggest part of the tax bill in Missouri, Minnesota and Cook County, Ill. Business real estate in these locations typically supplies 55% or so of the property tax revenues, when market value is far less, Tenenbaum says.

"Property tax is the only subjective tax in this country," says Hill. "So it's relatively easy for a town to tax a business facility at a higher rate than a residence." Doing something about it, though, is a little more complicated. But you can fight City Hall—if you want to.—**Ben Weberman**

In Dallas

Opened as recently as the autumn of 1980, this magnificent hotel is the first of such style in the American Southwest. It provides hospitality in the grand manner; the finest of modern facilities and comfort, with personal service and attention to detail in the classic European tradition.

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67

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CLAYTON: world headquarters for Apex Oil, the Brown Group, Charter National Life Ins. Co., Chromalloy American, Coin Acceptors, Inc., General Dynamics, Graybar Electric, ITT Diversified Credit and 7-UP.

What's the difference between a handbag and a shopping bag or a phonograph and a toy part? Answer: millions of dollars.

Eccentric customs

By Richard Greene

Attention, corporate officers who stay up late worrying about reducing taxes: You may be giving Uncle Sam all sorts of money you don't have to. And not through the IRS, either, but through duties you don't really have to pay on imported goods.

Take blue jeans. Styles with ornamental stitching have a higher duty than unadorned jeans. But all you need do is find a function for that stitching—holding on the back pocket, for example—and your customs fees will be lower.

Attorney Irving Mandel is a founding partner of Mandel & Grunfeld, the nation's largest law firm specializing in customs matters. He thinks that many large, publicly held companies are ignoring opportunities to cut import duties. You would expect him to say that, of course. Listen to Mandel for a while, however, and his point comes home. Customs tariffs are a hodgepodge of fine print, generally written for special interest groups. Interpretation is hairsplitting of the most ridiculous sort, but doing it successfully can save big money.

Take the case of The Digital Watches That Weren't. Historically, watch importers paid duties on three separate components: the movement, the casing and the band. But digital watches have no moving parts, which means no watch-movement duty.

When the courts accepted that logic, customs officials—after a bit of legal pressure—deemed the guts of digitals to be "electronic articles not provided for elsewhere," which have a lower duty. Presto, importers saved up to 50 cents on each watch with a wholesale prices of $3. Multiply that by millions of cheap watches coming into the U.S. each year, and you have a fair bit of cash.

It doesn't end there. Mandel: "We argued that since there is no longer a watch movement, this is no longer a watch. Therefore, there's no reason to treat the band separately anymore. The band is included with the 'electronic article not provided for.' " Additional saving: about 8 cents per watch.

Then there's The Great Tote Bag Controversy. Here the question was whether tote bags are handbags or shopping bags. Mandel wanted them to be classified as handbags, which had the lower duty. He took the matter to court. "Policemen testified that these weren't secure enough to be handbags because people were having wallets stolen from the tote bags," recalls Mandel. "But that ultimately worked against the government. If people were complaining about losing wallets, then they were using these things as handbags."

The cases go on: Are frogs legs fish or fowl? Are doll voices phonographs or toy parts? Are artificial flowers with no metal wire really artificial flowers? If you think that all the important issues will be settled soon, crease no brows for the customs lawyers. In 1985 the government will introduce an entirely new set of duties. "That," says Mandel, "is like an annuity act for us."

Perry Mason v. Marcus Welby

Pull up your seats, ladies and gentlemen, for a classic confrontation: It's the lawyers versus the doctors. But before you enjoy the fun, remember we all have a stake in the outcome.

The fight is over malpractice laws. Several states, such as Florida, Illinois, Michigan and New York, are considering more stringent malpractice statutes.

In New York, for example, the new law would:

- Set a $100,000 limit on damages for noneconomic causes, what the lawyers call "pain and suffering."
- Provide for payment of damages over a period of years, through annuities, instead of entirely up front.
- Limit legal fees to 10% of any amount over $100,000.
- Make several changes designed to control the kinds of malpractice cases that can go to trial and the backgrounds of doctors who can testify as expert witnesses in those cases.

The situation needs remedying: Greedy doctors are not the only cause of spiraling medical costs; greedy lawyers are getting their share, too. The average paid on malpractice claims in New York rose from $36,000 in 1976 to $115,000 last year. That's the *average:* Many mount into the millions. And the lawyers usually get 33% of that. Not bad.

As one would expect, however, malpractice attorneys are vocally opposed to the new legislation. "Why should the man who puts out a product that causes someone harm follow a different code than doctors?" huffs Charles Kramer of Dillof, Tessel, Duffy and Moore. "There is no justification for doctors—the most affluent professionals—to get these benefits at the expense of their victims."

Of course, Kramer's argument that the doctors shouldn't get help just because they make good money doesn't hold water. In the real world, the doctors don't pay anyway; the public does.—**R.G.**

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And its protection is designed by Rollins Burdick Hunter.

NEW YORK—The Verrazano-Narrows Bridge. Millions of tons of concrete. Enough wire cable to encircle the globe. Twin steel towers so far apart, they were built to conform to the curvature of the earth.

To build the Verrazano, the Tri-Borough Bridge Authority needed the help of building experts. And when they needed a protection plan for everything from tornado to third party liability, the Authority called in another kind of expert.

The experts of Rollins Burdick Hunter.

Let us put together a team targeted specifically to you and your company's needs. A team that will strive to go beyond the traditional in protecting your assets.

Just like we did on this little job in New York.

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Edited by William G. Flanagan

What belongs to you when you change jobs? Take even your Rolodex, and you could be sued by your ex-employer.

Who owns your brains?

By Kevin McManus

(continued from the cover)

. . . the company's parent, RCA, was known to be ready to sell it.

The question raised in the Vittoria case is rock-bottom fundamental: What right does an executive have to use what he or she learned in one job at a new job at another company? It's not an easy question, and there are no simple answers. This is not a question of secret formulas or of patents or of working prototypes, but of matters that are far more subtle. As the rising number of lawsuits testifies, employers feel increasingly forced to throw legal obstacles in the path of employees aiming to work for the opposition or set up their own competing shops. After all, competitors do lure away key people just for what they know of a given process or marketing plan. Venture capitalists are always waiting in the wings, ready to back a good idea. And executives are increasingly immune to sentiments like loyalty. Peter Rabinowitz, president of the Boston recruiting firm P.A.R. Associates, puts it very well: "Job candidates are saying to me, 'I wasn't too crazy about going to IBM or TI and all the bureaucracy that went with it, but I knew it would be a good ticket.' " Is that stealing? Or just being smart? Increasingly the courts are having to decide.

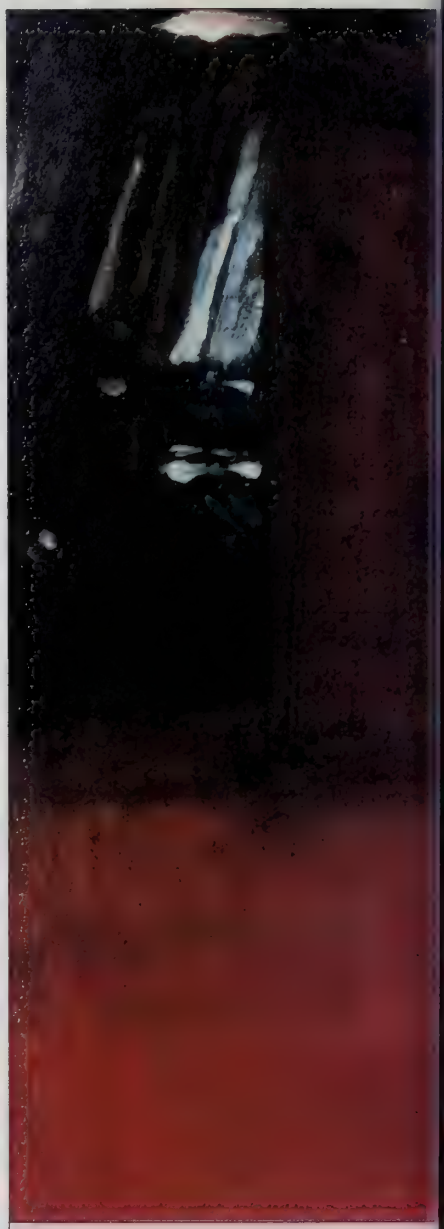
At high-tech companies especially, you can easily run afoul of these questions when you jump ship. Computer industry leader IBM, for example, is breaking new legal ground as it stalks ex-employees it thinks are walking away with the company jewels. "IBM is sort of the trend setter in litigation," notes Steven Brill, publisher of *American Lawyer*. "And computer technology is just one area. We see law firms developing specialties in different kinds of trade-secret litigation that just didn't exist before."

One law firm, Brown & Bain of Palo Alto, which does, indeed, specialize in trade-secret litigation and numbers IBM among its clients, is swamped. "Business is very good," says Philip Berelson, a partner in the firm. "We have more requests for our services than we can really handle out of this office at this time."

It's hard to predict under what circumstances an employer will actually sue a defector, let alone who will win in court. But the particulars of some recent cases offer guidelines. One is obvious: The better your chances of doing real damage, the heavier the lawyers come down. The Hertz complaint against Avis, for example, contains a number of charges, including breach of contract and pirating of employees. But the most serious one alleges that Vittoria conspired with Avis to steal key information from Hertz before he resigned.

Here are some recent suits involving giant companies:

- In California IBM is suing a group of former employees who recently started a company called Cybernex Corp. to make thin-film, read/write recording heads. These tiny, intricate devices go into disk drives for the kind of computer that supports the work of, say, airline reservation clerks. IBM alleges that the employees, who helped develop such devices at IBM, misappropriated its technology when they set up Cybernex.
- In Houston, Texas Instruments has charged a group of former employees with using TI trade secrets in setting up a personal computer company. The upstart, Compaq Computer Corp., has filed a countersuit claiming that TI is trying to drive it out of business.
- In Boston last year, Merrill Lynch sued Jeffrey Wilgus, a broker who had resigned to join Bache in the same city. There the issue was Wilgus' solicitation of his Merrill Lynch clients



Joseph Vittoria, then president of Hertz Europe, meets with Avis' J. Patrick Barrett while awaiting a London flight

After joining Avis in 1982, taking 15 executives with him, Vittoria* (left) *was sued for stealing trade secrets and breaking his contract. Having been demoted at Hertz, Vittoria, now president of Avis, calls the charges "nonsensical." The case is still pending.

after he departed—an act forbidden by his contract.

In the IBM case, Cybernex is accused of misappropriating virtually the entire IBM process for making recording heads. According to the complaint, "It is inconceivable that an organization could have duplicated IBM's thin-film head production process without access to IBM trade secrets and confidential information, especially in the short period the founder defendants and Cybernex devoted to this effort."

Cybernex set up its San Jose, Calif. production facility in less than eight months and began shipping prototypes of its product less than a year after that. IBM claims to have spent 14 years—"an arduous process of trial and error"—perfecting its process.

Responds Cybernex cofounder and President William Klein: "About ten companies make this product. We have independently developed what we think is a much better process than most of them have, and many of the people involved never worked for IBM."

Figuring out who is right has led the judge into such a technical maze that he has enlisted the aid of a patent attorney. Significantly, he has not issued an injunction to put Cybernex out of business—as IBM requested—while he studies the charges.

Whatever the outcome, IBM's action by itself sends all its employees a message: Hands off company ideas. It frequently does so, even in its annual report: "Our investments in research and development and the innovative ideas of our employees are IBM's stake in the future. We will do everything appropriate to safeguard those assets."

A 1982 case left no doubt that that warning has teeth. IBM sued three executives for starting a company while still employed by IBM. The sole purpose of the firm, Bridge Technology, apparently was to sell design information about unannounced IBM products in the personal computer field. Within weeks of filing a 23-page amended complaint, IBM won an injunction that prevented the employees from designing or making any computer products at issue in the case for three years. The court also ordered

Personal Affairs

the employees—two senior engineers and a marketing executive—to give back to IBM portions of the salaries they were paid before being fired in September 1982.

The Texas Instruments dispute with Compaq Computer, while similar to IBM's case against Cybernex, illustrates the use of a countersuit as part of a defense. A group of TI employees, led by Joseph Canion, broke away from the company in late 1981 and early 1982. They formed Compaq to produce and market a personal computer. Entrepreneurial daring be damned, TI alleges that Compaq employees stole trade secrets and infringed a number of TI patents in making its computer. Compaq calls all of those patents invalid, unenforceable or not infringed upon. Furthermore, reads its countersuit, "None of the former TI employees were requested to divulge or use any confidential information of TI in their work for Compaq."

Trade secrets are also at issue in the Hertz-Avis case, but the court documents are rich with accusations of the sort of wrongdoing, mainly on the part of Joseph Vittoria, that any discontented, sought-after, top-level executive could blunder into.

The dispute seems to center on Vittoria's actions between early February and mid-April of last year. In January 1982 Vittoria had been sent to London as president of Hertz Europe. He says he was unhappy about the assignment because it was a demotion (his previous title was vice chairman) and because he did not want to move his family to London. He began to commute, returning to New York every other weekend. He also put out feelers for another job.

On Thursday, Feb. 4, as he was at home packing for a flight back to London, he got a call from an executive recruiter doing a search for Avis. "Did you know Avis was looking for a president?" he was asked. No, Vittoria said, but he was interested. The recruiter arranged for him to meet later that day with Avis CEO J. Patrick Barrett. The spot they agreed on was the TWA Ambassador Lounge at Kennedy Airport, not far from Avis' Long Island headquarters.

At that meeting Barrett confirmed that Avis was looking for a president, but nothing was settled. Two weeks later they met again, at the Sky Club in Manhattan, but, again, no commitment was made. In mid-March Vittoria learned from another recruiter in London that the Avis presidency had been given to Howard Miller, and Vittoria was asked if he was interested in the job of executive vice president. He said he was.

On his next visit home, on Mar. 25, Barrett asked Vittoria to dinner on Long Island and there offered him the executive vice presidency of Avis.

Joseph Canion, ex-TI executive and now president of Compaq Computer Corp., and his "better mousetraps"
Texas Instruments charges Canion and other ex-TI men used secret data and infringed patents in making Compaq's personal computer. Compaq denies it all, and is countersuing.

Vittoria accepted. "It was a verbal agreement," he explains. "I knew it was good, but I didn't want to resign from Hertz until I had the offer in writing. I went back to London and conducted business as usual."

On his next visit home, at Easter, Vittoria received Avis' offer in writing. The following Monday, Apr. 12, he tendered his resignation to Hertz President Bennett Bidwell. "Ben asked me to give him a couple of days," he recalls. "Two days later, on Apr. 14, I went back to him and he offered me full pay to go home and not work for a year and a half, until my contract ran out." (In an affidavit, Bidwell said he offered Vittoria full pay to act as a consultant to Hertz, and that Vittoria told Bidwell that he "probably would not" end up working for a competitor.) Vittoria went to Avis instead, and was later followed by about 15 Hertz executives. He was eventually named president.

Hertz is arguing that the Kennedy Airport meeting and others were not for the purpose Vittoria has described. In a court memorandum Hertz claims that, for a period early in 1982, Vittoria was essentially "serving two masters." Specifically, he is alleged to have taken an "eight-day tour through Europe gathering Hertz' documents and trade secrets."

The accusation is "nonsensical," says Vittoria, who believes the suit is simply a tactic to impede Avis. "Hertz is a very aggressive company," he says. "They've owned No. 1 for years and they guard that jealously. When someone comes along with any kind of a real threat, they unleash all the weapons in their arsenal."

State Supreme Court Judge Leonard Cohen, who is hearing the case, conceded in an interview that he is not sure whether there *are* trade secrets in the car rental business. In any event, last January he ordered Avis to return to Hertz a number of documents that were supposedly taken to Avis by departing Hertz employees. However, and more important, he refused to grant Hertz' request that Vittoria and other former Hertz employees be forbidden to keep working for Avis. The case could still come to trial.

An interesting facet of the dispute is Vittoria's contract with Hertz, which specifically forbade him to compete with his employer for two years after he left the company—a "restrictive covenant." Vittoria contends that Hertz itself broke that contract first, by demoting him. Judge Cohen appears to agree since he has not stopped Vittoria from working for Avis.

Boston stockbroker Jeffrey Wilgus with subpoena from Merrill Lynch
Jumping to rival Bache, ex-Merrill Lyncher Wilgus took his client list with him, against his contract. Merrill sued. Wilgus paid $12,500 in damages, but managed to keep his new job—and the client list.

THE CAR THAT SET THE STANDARD NOW EXERCISES ITS RIGHT TO RAISE IT.

BMW INTRODUCES THE 318i.

The year was 1977. The nation was between fuel crises and the automotive industry had decided that performance doesn't sell.

BMW introduced the 320i, one of those rare automobiles that seems to usher in the era in which it appears. It became "the quintessential sports sedan"..."the sort of car enthusiasts turn into legend" (Car and Driver). And it proved an entire industry wrong.

Now that car has ushered in its successor. And proved an entire industry late.

A REFUSAL TO REINVENT THE AUTOMOBILE.

The 318i is built on the belief that cars that are annually new find themselves at a permanent disadvantage to those that are annually better.

The reason is obvious: There's never time enough to refine something you're forever reinventing.

The 318i is, in contrast, one of the most refined sports sedans BMW has ever built.

Its redesigned fully-independent suspension represents a maturing of a design bred on racecourses, and provides ever greater adhesion. "Its hand and roadholding," previewe one automotive journalist, "magnificent."

A new L-Jetronic fuel-in tion system helps extract ev more exuberance (and torc from an already willing engi

A new power steering sy tem matches the degree of power assistance to

ing conditions, providing re at lower speeds and less higher—while never insu- ng the driver from a tactile areness of the road.

Its technology has ad- ced, with such additions as analog fuel economy indi- or and an electronic system t actually calculates en routine service is needed.

Its aerodynamics are im- ved, lowering wind resis- ce without resorting to the dge-on-wheels architec- e that many cars adopted dd a couple of mpg's to el efficiency figure. The 8i has managed that, too— vering a remarkable 27 g, 38 highway.

(EPA fuel efficiency figures for comparison only. r actual mileage may vary, ending on speed, weather and length of trip; actual highway mileage will most likely be lower.)

It is also roomier, quieter, and otherwise better in virtually every way an automobile can be better—including the most important way. The 318i is a balanced car, a matching rather than just a gathering of parts and systems, and as close to perfect equilibrium as a car in its price class has ever come.

AN INVESTMENT, NOT A SPECULATION.

BMW recognizes that there's no such thing as a car worth buying regardless of price. That price must be justified—justified when it's bought, while it's being driven, and later when it's sold.

BMW's perform well in all tenses. Free from programmed obsolescence, and supported by a growing body of car buyers better able to recognize and pay for quality, the BMW 3-Series has traditionally retained its resale value far better than most other automobiles. (Source: NADA Used-Car Guide.)

It's also backed by one of the most confident warranties: a 3-year/36,000-mile limited warranty and a 6-year limited warranty against rust perforation.

(Warranty applies to new automobiles purchased from authorized U.S. BMW dealers only. See your BMW dealer for details.)

In short, the 318i is a new car that arrives without the conventional handicaps of the new-and-untried—a car that elevates the admission requirements for all cars asking to be taken seriously as sports sedans.

We invite you to visit and test drive the new standard at a BMW dealer near you.

THE ULTIMATE DRIVING MACHINE.

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Personal Affairs

By and large, noncompete contracts such as Vittoria's are being looked at skeptically by judges. "In effect, they attempt to deprive people of making a living after leaving jobs," says Joseph Auerbach, a practicing attorney and a professor at the Harvard Business School, "and the courts are not going to do that—with a signed contract or without one."

Jeffrey Wilgus, the broker sued by Merrill Lynch, signed a noncompete agreement when he joined Merrill in 1975. In January 1981 he quit the firm's Boston office and went to work for Bache in the same city. Upon arriving at his new job, Wilgus wrote letters to about 70 of his biggest customers at Merrill, asking them to stay with him at Bache. Merrill sued, citing the noncompete agreement he had signed, and asked $900,000 in damages (thrice Wilgus' gross production in 1981). Wilgus ended up paying Merrill Lynch $12,500, but he was allowed to keep all his clients.

But the Vittoria and Wilgus cases should not be taken as evidence that courts will shoot down all noncompete agreements. Rather, says Stanley Lieberstein, author of *Who Owns What Is in Your Head?*, the courts regard unfavorably those agreements that are

McLitigation

Like any innovative industry leader, McDonald's Corp. often loses employees it would dearly love to retain. But nowadays, when key executives depart the company, they may find it difficult to escape the long shadow of the golden arches. One former executive, who insists on anonymity, feels he is still in the company's shadow, years after leaving. Is he persecuted? Paranoid? Read on.

The former employee (we'll call him McEx) was an expert in market research—sensitive territory for any major marketer. He quit to join a competitor a few years ago, taking with him a large batch of papers. McDonald's soon served up a lawsuit, alleging he walked away with company secrets.

Before launching the lawsuit, within a few days of his leaving, McDonald's sent a letter to McEx warning him not to divulge any "confidential information" regarding a number of activities. Among them were marketing, advertising, training methods, profit margins, raw materials prices, selling prices and operations procedures.

The letter further requested a meeting with McEx, at which he would be asked to return any written materials he had taken from McDonald's and also would sign an agreement not to divulge any company trade secrets to his new employer.

McEx declined the invitation to the meeting. McDonald's promptly filed suit in McEx' new home state. The company managed to win a temporary restraining order that McEx says effectively meant he could not perform any market research for his new employer. He was thereafter relegated to less important work.

Twelve weeks after the suit was filed, McEx turned over to McDonald's a carton of papers he had taken with him. McDonald's claims they contained "sensitive information." McEx maintains they were "just a bunch of junk"—tools of his trade, available to anyone in the business.

Still, the injunction stuck, and the new employer would not let McEx do what he had been hired to do. "The court found merit in our claim that there was confidential information that was worthy of protection," says McDonald's general counsel, Shelby Yastrow. "That's not to say he would have divulged that information. But there are certain things you don't take a chance on." Finally, 5½ months after the suit was filed, the case was settled out of court. McEx agreed not to use information gained on the job with McDonald's in his new employ. But the issue had become academic. Disenchanted with his new non-job, and aware that his employer was viewing him as more of a problem than an asset, McEx left his new job. He is now employed by another food chain, not involving fast food restaurants.

A market researcher left McDonald's for a competitor. It sued him, and won, though he had signed no contract.

Why was he sued in the first place? For two reasons, he believes. First, McDonald's wanted to slow down the competition, and—whether or not he was a threat—suing him was one way of doing that. Second, McDonald's wanted to set an example for other would-be ship-jumpers.

Shelby Yastrow says that in spite of McEx' worries, McDonald's has no interest in trying to make more trouble for the executive. "He's very good at what he does," says Yastrow, "and he's a nice guy. It was an unfortunate thing. I think he's sorry it happened."—**K.M.**

How dare The Glenlivet be so expensive?

How dare we place such a premium on our 12-year-old Scotch? The same reason vintage wines and fine cognacs are so expensive. Superior taste. Just one sip and you'll know that The Glenlivet has a taste that's decidedly superior.

The Glenlivet is Scotland's first and finest single malt Scotch. Nothing but 100% Highland malt whisky, distilled from natural spring water and fine malt barley, aged in oaken casks, just as it always has been.

Only our time-honored methods can truly achieve The Glenlivet's unequaled taste. A taste that sets it apart. Its smoothness, body and bouquet are qualities found only in this unique Scotch.

Of course, you may elect to purchase a good Scotch that's less expensive. But for a truly superior taste, you have to pay the greater price.

The Glenlivet

12-year-old unblended Scotch.
About $20 the bottle.

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Personal Affairs

too sweeping with respect to either time or geographic area. More enforceable, he says, are noncompete clauses that call for the employee not to work for competitors for, say, only six months after leaving. And the more effective contracts, Lieberstein says, are likely to limit the geographic area in which the employee may not compete.

Disclosure agreements designed to protect company secrets are taken much more seriously by the courts. An employee need not even sign a contract containing a disclosure agreement for it to be enforceable. That is, each employee is said to have a "fiduciary duty" to his employer not to disclose trade secrets.

Aware of the difficulties in enforcing overly comprehensive contracts, companies are increasingly resorting to agreements that specify what areas of a person's job are confidential. Lieberstein, who writes such contracts for client companies, advises that disclosure clauses should simply warn employees that some or all of the information they're working on may be proprietary. And he suggests that employees be obligated to check with the company before disclosing any such proprietary information while employed or afterward.

An especially fuzzy area in most contracts has to do with notes, memos, reports and other documents that an employee may take with him to augment what's in his head. Harvard's Auerbach offers the hypothetical example of a physicist employed by a firm that designs nuclear power plants. The physicist has been doing research in the firm's laboratory for ten years. He has signed an agreement that the firm owns all of the inventions he produces while employed there. Furthermore, he has agreed to leave behind his notebooks if he should quit the job.

"His notebooks are the critical thing," says Auerbach. "In them he has ten years of experiments listed—and the ones that failed are just as important as the ones that succeeded, so he doesn't repeat the failures. Now he accepts an offer from another firm . . . and . . . off he goes with his notebooks. Does the company have a right to get them back? Can it prevent someone else from seeing his notebooks? The answer is yes."

E.F. Hutton Chairman Bob Fomon gets the news from defecting George Ball
Though it shocked the securities industry, George Ball's departure to head Prudential-Bache Securities failed to flap Hutton's Fomon enough to prompt a suit. But Fomon did charge that Ball and a fellow defector took proprietary lists with them. Ball denies taking any proprietary information.

In the real world, of course, employees often take with them documents they have amassed on the job—from Rolodexes to rejected proposals—and companies have had only limited success in getting them back.

When Jeffrey Wilgus left Merrill Lynch, for example, he was later able to contact his customers because he had taken with him copies of records listing their previous transactions, current holdings, addresses and phone numbers. The photocopying, he said, was done at Bache before Wilgus quit Merrill Lynch.

"It wasn't a matter of giving the pages to Bache," Wilgus explains. "They were *my* pages. What I did was basically what all brokers did and still do when they quit. When you leave a brokerage house, the house you're going to has everything set up so that the day you walk in the door you're in business."

Why the complete investor owns a little gold.

Maybe your investments haven't been so right in recent years. Maybe you ought to do some rethinking.

Maybe you're committing too much to whatever is the latest investment trend. Or chasing the highest interest rates, then watching them drop—and at the same time living in your over 50 percent tax bracket.

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Personal Affairs

"That may be standard practice, but it's certainly not accepted by all firms—especially ours," says a Merrill Lynch lawyer. "What we object to is when a broker copies his records well in advance and notifies his customers beforehand that he is leaving. He solicits them to join him at the new brokerage house and puts all the information on transfer forms—before he quits. And then he piously pretends that it was not done that way and that he never really solicited the customers but that the customers loved him and wanted to join him." Wilgus likely was spared a harsher penalty than his $12,500 fine because he sent out his letters of solicitation only after giving notice to Merrill.

The issue of missing documents came into play in George Ball's celebrated defection last July from E.F. Hutton to Prudential-Bache. Shortly after Ball left, E.F. Hutton Chairman Robert Fomon sent a letter to Prudential Chairman Robert Beck. In the letter Fomon pointed out that Ball's copy of the June production run of account executives had not been seen since Ball left. Also, Fomon wrote, one of the employees who had followed Ball to Pru-Bache had apparently taken with him a copy of Hutton's institutional mailing list.

According to Fomon, Ball himself answered the letter, saying simply

Read the fine print

Mention employment contract and the typical executive thinks of a cushy arrangement that protects him in case things don't work out with his new employer. But the contract that most employees sign tips the scales decidedly in the other direction. It protects the company by requiring employees to promise not to divulge secrets if they leave and, in many cases, not even to accept employment with a competitor, sometimes for years.

According to Towers, Perrin, Forster & Crosby, a management consulting firm, about one-third of the top 100 industrial companies in the U.S. require contracts. The practice is more widespread in such highly competitive industries as computers, pharmaceuticals, toys, defense equipment and electronics.

If you are asked to sign a contract, try to take it home and have a lawyer look at it. At least make a copy that you can consult later in the event you contemplate other employment and are worried about violating that contract.

According to Stanley Lieberstein, an attorney with Ostrolenk, Faber in New York who wrote *Who Owns What Is in Your Head?*, one clause to be especially wary of is the so-called restrictive covenant. If enforced, it could wreck your career because it entitles your employer to prevent your working at your profession for months or even years after leaving the job. Several states have deemed such a covenant so unfair that they prohibited it outright, namely California, Florida, Michigan, Indiana, Alabama, Louisiana, Minnesota, Montana, North Dakota, South Dakota, Oklahoma and Wisconsin.

Lieberstein suggests that if your employer insists upon such a clause, you should try to obtain, in return, a written promise from the employer to pay you for the period in which you are restrained from "competing."

Many contracts call for you to transfer to the company any inventions or patents that you might produce while in its employ. The term "invention" can encompass ideas, concepts, designs, devices, formulas and computer programs.

The obligation to transfer any such property to your employer is reasonable, says Lieberstein, as long as the invention in question pertains to the company's business. So, for example, if your company makes garden hoses, you should not be obliged to hand over your sketches for a new type of electric blanket, even if you made them in your office on your lunch hour.

But what if your sketches are of a new lawn-care product? Here the rules become open to legal debate. Consult a patent attorney if you are in doubt about any invention.

Note: In the absence of a contract, you may retain ownership of any invention unless you made it upon the specific request of your employer. And you may also keep the rights to all inventions made before your employment began.

"Trailer clauses" are also to be avoided. These give the company ownership of your inventions made during a specified period after you leave. Less commonly seen than noncompete agreements, trailer clauses are designed to prevent you from thinking up something brilliant and then quitting to develop it yourself.

Regarding trade secrets and the like, your contract might contain a section like the following, taken from Gulf & Western Industries' companywide employee agreement:

I recognize that in the course of my employment with the Company I may be exposed to or generate confidential information otherwise not publicly known, which relates to the Company's affairs. I agree that I shall neither disclose to any person, firm or corporation, nor use for my own or another's benefit, during or after my employment, any such confidential information . . . unless specifically authorized in writing by the Company.

With respect to company property, G&W's contract specifies:

Upon termination of my employment, I will promptly deliver to the Company all drawings and other papers which I have obtained from the Company or any of its customers, suppliers or affiliated companies, and all copies thereof which I have made or permitted to be made. I further agree that I will promptly return all papers, memoranda, drawings and notes made or generated by me, and copies thereof, relating in any way to the Company's business. . . .

Both these paragraphs are reasonable, says Lieberstein, and similar versions of them are common in contracts nowadays.

Bear in mind that, whether or not a contract has been signed, you are still obliged to keep under your hat all trade secrets with which your employer has entrusted you. This obligation, often called a "fiduciary duty of loyalty," can't keep you out of the job market, but it does provide your employer with some legal recourse if you should join the competition and spill your guts. Indeed, that is just what McDonald's claimed when it succeeded in muzzling a former market researcher *(see p. 174)*.—K.M.

that neither item had been taken. "George said he did not have any proprietary information," Fomon recalls, and adds, "I don't believe that." In spite of this, Fomon contends he never considered suing Ball—who, strange to tell, had not signed a contract—or any other Hutton employee who went to Bache. "What do you get by suing someone?" Fomon asks. "I've got better things to do with my time than be involved in lawsuits."

Such forbearance should not be counted on, however. And if you should be sued after leaving an outfit, your defense in court could cost a fortune even if you win. Consider the case of Philippe Villers, founder of Automatix Inc., a robotics company based in Billerica, Mass.

In April 1979, while a senior vice president at Computervision, a computer-aided design company he helped found, Villers approached the executive committee with an idea for a robotics venture. His 80-page proposal was accompanied by a two-hour verbal presentation. His idea was rejected.

"The consensus was that the company was stretched too thin to undertake such a venture at that time," Villers recalls. "It was growing at the rate of about 100% per year, and in my view that's the very time you should plant seeds." Villers decided to plant the seed himself. He left Computervision in September and founded Automatix shortly thereafter.

Nine months later Computervision sued him for, among other things, theft of robotics secrets and loss of a corporate opportunity. The case dragged on for two years before a jury found Villers innocent. His defense hung on his presentation of the plan to the executive committee and Computervision's rejection of the idea. The jury ruled that once turned down, the idea did, indeed, belong to Villers.

Yet the victory was costly. "I recovered my court costs," he says, "but that's a joke because they amounted to about $4,000. I spent close to $150,000 on attorneys' fees."

If you do leave your company to join the opposition or start your own firm, here are some tips to keep in mind that improve your chances of escaping a lawsuit:

• Beware of disclosing "trade secrets." In your new job you will inevitably draw on your career experience, of course. But, at least in the eyes of your ex-employer, you will inevitably exploit what may be considered "proprietary information." According to Lieberstein, there is a difference between using such information and formally disclosing it—a difference the courts weigh heavily. What, precisely, constitutes a trade secret? "A trade secret," says Lieberstein, "is something that is not generally known in the trade or industry to which it applies, and which provides its owner with a competitive advantage." However, he cautions, "In a given case a trade secret is what a judge says it is."

• Make it clear, before you leave, that you have no intention of using trade secrets to the company's disadvantage. It's a good idea to have your new employer write your old one, formally stating that you will not be asked to divulge trade secrets.

• To be safe, take no printed material with you when you leave, other than purely personal papers. (That includes photocopies.) If you are ever sued, the fact that you did take documents could tip the scales in the plaintiff's favor in a close case. Even your Rolodex remains company property if it contains names and addresses of customers, says Joseph Auerbach.

• If you are establishing your own company, try to remain friendly with your ex-employer. If sensitive customer lists are involved, you may be able to agree to leave certain accounts alone for a specific period—and thereby forestall a suit.

Where's the right and where's the wrong in all this? Some of the suits may be sheer harassment to discourage employees from going over to competitors. But before throwing your sympathy to the little individual over the big, soulless corporation, keep in mind that there are two sides to the issue. A highly successful entrepreneur talks about what he calls "the dark side of venture capital"—where employees working on a product leave the company, get financial backing and beat their old employer to the marketplace with its own idea. Such incidents are not rare. And the line between aggressive entrepreneurship and outright stealing is becoming increasingly blurred. ■

Philippe Villers, founder of Automatix, and one of his robots
While a senior vice president at Computervision, a company he helped found, Villers suggested the company make robots. It declined, so he formed his own company to make them. Computervision sued, claiming loss of corporate opportunity. Villers defended himself and won.

Faces
Behind The Figures

Edited by John R. Dorfman

Publishing passion

"Duke stroked her body all over, his hands learning again the contours of her slender neck, her shoulders and her throbbing breasts. . . ."

Welcome to Silhouette Books' fifth line of romance books, called Intimate Moments. It is Silhouette's most provocative line yet. The above is from *Sweetheart Contract* by Pat Wallace, but it's probably fair to say that passages in romances are somewhat fungible these days.

Three years ago Simon & Schuster, part of Gulf & Western, launched the Silhouette Books division. Since then sales have risen to $144 million.

Harlequin and Silhouette together now have about 89% of the $300 million market. John Gfeller, Silhouette's president, who likes to play classical piano, has pulled off quite a coup. His division, with 41% of the market, is breathing (heavily) down Harlequin's neck. Harlequin, which once had the romance market to itself with a 90% share, is clutching 48%. Such firms as Avon, Dell and Bantam Books fight over the crumbs. Gfeller feels that the market should grow by 25% per year and Silhouette should grow at least at that rate.

Gfeller has an ear to the marketplace through A.C. Nielsen, which has an exclusive contract to feed industry performance data to Silhouette. In addition, Silhouette was the first to use extensive consumer research to find new romance growth areas. For example, readers said they wanted more "sensuality," so long as it was well written.

Silhouette has been the leader in persuading major bookstores and retail chains to set up separate "romance centers" in their stores. It has a 50% share of the market for romances in B. Dalton and Waldenbooks, and 40% in such stores as Rite Aid, Safeway, Winn-Dixie and Kroger.

Silhouette Books publishes 26 titles a month through its five lines, compared with Harlequin's 22 per month. The newest series, Intimate Moments, guarantees its readers four 256-page books per month.

Silhouette sells in 97 countries and in 13 languages. "There is a universal acceptance of this product among women around the world," says Gfeller. "They like American romance."—**Paul Bornstein**

Silhouette Books President John Gfeller
Breathing (heavily) down Harlequin's neck.

Up the middle

At 42, Carol J. Parry runs one of the most successful operations in banking. The Chemical Bank senior vice president heads her bank's extensive "middle market" operation in Manhattan and New Jersey, which provides loans and other banking services to businesses with sales between $5 million and $150 million.

Chemical is the clear leader in the New York metropolitan area middle market, according to a recent Lou Harris study, and it is expanding its lead. About 37% of the firms surveyed had a business checking account with Chemical, compared with only 20% for Chase Manhattan, 24% for Citibank and 27% for Manufacturers Hanover Trust. Even more strikingly, 18% of the firms considered Chemical their lead bank. That was double the 9% reported for Citibank, and well over the figures for Manny Hanny (14%) and Chase (10%).

Parry's group serves most of Chemical's more than 1,700 metropolitan New York middle market customers. That makes her responsible for over $1.1 billion in deposits and $1.2 billion in loans, as well as the generation of millions of dollars in

Carol Parry of Chemical Bank
Ahead of the New York banking pack—and gaining.

noninterest service fees. The middle market is particularly important because it is among the most profitable segments in banking. At Chemical, the return on assets for the middle market division is more than triple that for the bank as a whole. In part, says Parry, that's because small businessmen have fewer alternatives for funds, so loan spreads are higher. In addition, small companies tend to keep substantial, mostly free, cash balances on deposit, and buy a wider range of the highly profitable bank services than larger companies.

"We deal directly with the owner," Parry notes. "Our customers look to us for advice and ideas as well as credit." Her group also provides personal banking services for key people.

Parry joined Chemical in 1978, after a stint as head of New York City's Department of Special Services for Children, where she managed a staff of 3,000 dealing with foster care and juvenile delinquency. That may seem an unlikely background for a banker, but Parry also spent two years as a management consultant at McKinsey & Co.

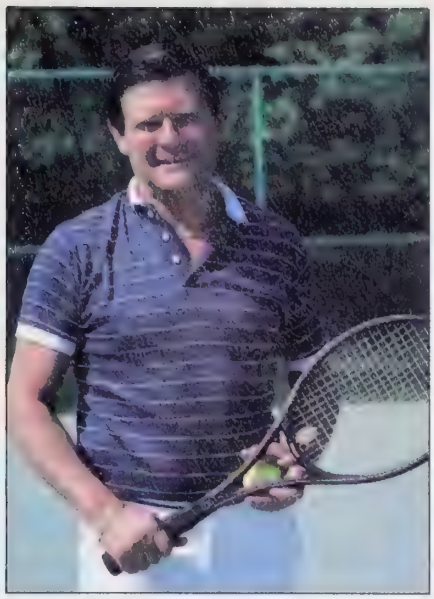
"The people are the product in banking, not the loans," Parry asserts. "The quality of my staff is what I'm selling."—**Subrata N. Chakravarty**

Catching the bus

"I couldn't care less about market shares," says Bjorn Ahlstrom, president of Volvo North America Corp., the $2 billion (estimated 1983 sales) subsidiary of Sweden's $10 billion AB Volvo. That's heresy in the car business, but Ahlstrom has a point: Unit growth and profitability are more important than share. Volvo concentrates on the priciest 10% to 15% of the American market. That's where the profits are. But unit growth is difficult, since the segment isn't growing at all. For the past decade and a half, carmakers have sold about 1 million upper-price cars a year in the U.S., recession or boom.

Volvo ads show that the company's North American sales have roughly doubled since 1976, to about 80,000 cars last year. True, but 1976 was a down year for Volvo because of a weak dollar and technical problems with its new fuel injection system. Since 1975, unit growth has run about 4.2% a year.

So where is future growth to come from? Ahlstrom is looking for it in buses and trucks. Volvo has just entered the U.S. city bus market, though it is already the second-largest maker of bus chassis worldwide (after Mercedes-Benz). From a plant in Chesapeake, Va., Volvo hopes to turn out some 600 buses a year, enough to capture roughly 10% of the U.S. city bus market. It intends to emphasize 60-foot articulated (bending) buses, a product no U.S. manufacturer makes. "We are not going after the Greyhound market—right now," says Ahlstrom with a big smile.



Ahlstrom of Volvo North America
Tennis is not just a hobby.

There are no smiles in the heavy-truck market, where, Ahlstrom concedes, "there are price wars all over," and nobody is making any money. Volvo expanded its U.S. truck business (now about $500 million sales) by acquiring most of White Motor (then in Chapter 11) in 1981. That wasn't a quick-payoff move. Like International Harvester and Mack, Volvo's truck operation is losing money. Unlike them, it is financially strong and needn't scrimp on engineering or product development.

Ahlstrom plots strategy from an office containing a striking tennis trophy. An enthusiastic player, he helped lead Volvo into sponsoring the Volvo Grand Prix professional tennis circuit. Personal indulgence? No, Ahlstrom says. Sponsoring tennis has been the company's most productive marketing step on a per-dollar basis.—**J.R.D.**

Horse cents

At 71, Leone Peters, chairman of New York-based Amerivest Group, claims he loves work too much to retire. He may really be saying that syndicating racehorses is too profitable to give up.

Consider Amerivest's latest deal, the $6 million syndication of 37 Thoroughbreds, including 1982 Kentucky Derby winner Gato del Sol. Peters and his partner, Amerivest President Leonard Messina, sold 24.5 shares to wealthy investors at $250,000 each and kept an additional 3.3 shares for themselves. As general partners, they take 10% of the profits right off the top, in addition to the 11.8% they receive as shareholders. Revenue comes from the sale of yearlings, stud fees ranging from $10,000 to $100,000 for the 21 stallions involved in the

Racehorse syndicator Leone Peters
Place your bet at the $250,000 window.

Faces
Behind the Figures

syndication, and Gato del Sol's winnings this year.

But the real kicker is this: Gato del Sol is syndicated as a running horse, not a breeding horse. When he retires to stud next fall, Peters hopes to resyndicate him for another $20 million. Peters and Messina will keep four shares each of this new syndication. The 24 limited partners in the first deal automatically get ten shares, or 25%, to split among themselves.

Peters started as a bookkeeper with Cushman & Wakefield Inc., a New York-based real estate company, at 18, and worked his way up to chief executive officer 41 years later. Now he's "honorary chairman." He got interested in racehorses in 1971, when he was recovering from a heart attack. By 1976 he owned 200 horses.

What happens, though, if Gato is injured, or if his stud fees aren't as high as Peters and Messina are expecting? "There's no question you can lose a lot of money in horses," says the burly Peters in his Rockefeller Plaza office. "But those who invest in quality horses generally make more per dollar than in any other business."

Well, maybe. One thing is clear: Peters' end of the game is profitable indeed. In the last seven years, he has syndicated dozens of Thoroughbreds, including such successful competitors as Hawaiian Sound and Tap Shoes.

Gato del Sol clearly is the star attraction to date, though. If Peters pulls off his proposed deal, it will be one of the largest Thoroughbred syndications in history.—**Walecia Konrad**

One-stop job-shopping

Five years ago Arnold W. (Bill) Aberman was 52 and considering early retirement after a successful career as a salesman, peddling textiles and motivational services. Instead he came up with an inspiration: "employment fairs."

The fairs bring together high-technology employers interested in raiding their competitors for talent, and employees interested in being raided. Aberman says his Business People, Inc. of Minneapolis grossed about $2 million last year and will gross around $3 million this year, putting on 30 or so employment fairs in 15 cities.

Aberman collects an average of $2,400 from each of about 30 participating firms at each fair. Firms such as Boeing, Hughes Aircraft, Mattel and Texas Instruments take part. Aberman levies no charge on the raiders' targets, whom he lures by direct mail and mass advertising. To mollify their fears of endangering their current positions, Aberman does not screen applicants and keeps no records of who wanders in. Once inside, the job shoppers reveal their identities only when and to whom they please.

Now, Aberman is branching out into "real estate fairs" where lessors and sellers of residential and commercial property will rent booths to make their pitch to anyone who wants to listen. Aberman is characteristically enthusiastic about the new venture, even though some real estate observers are not. "It's largely puff," says Norman Weinberg, senior editor of New York University's *Real Estate Review*. "He's just creating an occasion to rent the booths."

Even Weinberg concedes that Aberman is "a supersalesman." Aberman is not about to argue. "I'm gung-ho," he says, "and looking at new horizons."—**Neal Koch**

Ich bin ein subsidy

With beverage-can sales growth fizzling in the U.S., $889 million (sales) Ball Corp. is looking overseas for expansion. "Cans are mostly air," notes Richard Ringoen, president and CEO, so it's more economical to make them in Europe than to ship them. But Ringoen isn't making cans just anywhere. Ball is building a plant in West Berlin, that enclave of democracy and, well, socialized capitalism.

The reason for locating there lies in a single word: subsidy.

Because West Berlin is some 110 miles behind Warsaw Pact lines, it has found ways to coax new business beyond mere tax breaks. Ball's $54 million joint venture with PLM AB, a Swedish concern, will receive a grant of 25% of its investment from the West German and Berlin governments. In the first year of operation 75% of the investment can be written off as depreciation. The West Berlin tax rate is lower than the regular West German rate. And subsidies for shipping mean that Ball actually makes money on freight. "Customers will be at a disadvantage," says Ringoen, "if they don't buy from us."

Bill Aberman of Business People, Inc.
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Ball Corp. CEO Richard Ringoen
110 miles behind Warsaw Pact lines.

Beyond this, West Berlin is "a clean city, well-managed," and "the work ethic is good," Ringoen says. People get paid more, but that's all right. The government pays an 8% subsidy.

Ball Corp., first known for the mason jar, has lately found greater earnings growth in industrial goods than in packaging. Still, says Ringoen, a 57-year-old former engineer, the plant's projected return makes it worthwhile. Growth potential is great in Germany, where perhaps 10% of beverages comes in cans, compared with 50% in the U.S. Ringoen thinks the can market in Germany could expand to 20% or 25% of beverage packages: "There's an awful lot of beer consumed over there," he says.

West German bankers were good about providing financing, but "you can't get a *force majeure* provision in a bank loan over there," says Ringoen. Should the Warsaw Pact isolate the city, Ball would still have to make good on its loans.

"It's a concern," Ringoen admits, but he likes the odds. "West Berlin politically is a very, very important city. There's no way it could be given up, short of a total invasion of Europe by Russia."—**Robert McGough**

Good-bye, Ma

Potential competitors are pawing the ground to take on the newly independent companies of the Bell system when the AT&T breakup is completed next year. But Jack MacAllister, as head of one of the Bell independents, plans to do some invading of his own.

MacAllister, 55, will be CEO of US West, Inc., one of the seven new regional operating companies created by the divestiture. With $14 billion in expected assets and 9 million customers in 14 states, US West will be one of the largest corporations in America in its own right. And MacAllister does not plan to have it play a passive role.

MacAllister, who started out as a telephone installer in Council Bluffs, Iowa 33 years ago, is already hard at work at what amounts to a cultural transformation among his 80,000 employees. "If in the past you were responsible for a call switching system, your only job was to make sure it worked and gave reliable service," he says. "Now you also have to think of ways to provide more services to create more profits."

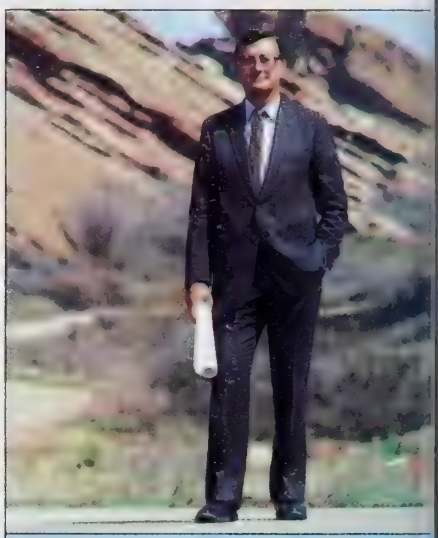
That's a big change, but his people are not intimidated by it, he says. They're "turned on by rewards that are expressed in the bottom line." His Denver headquarters staff, dedicated to identifying target markets from

US West's MacAllister and territory
"Bell" was left out on purpose.

Faces
Behind the Figures

which Bell has been previously barred, has already recommended a subsidiary to invade the potentially lucrative mobile telephone market and another to centralize the telephone directory printing of US West's three telephone companies—Northwestern Bell, Mountain Bell and Pacific Northwest Bell. The Yellow Pages operation, once running, could be applied to directories of all kinds.

The name US West itself has significance. The word "Bell" was pointedly left out to emphasize that the new company will not be merely a telephone company anymore. "If you have the courage to go ahead with what you think is right," says MacAllister, "it's amazing what you can do before anyone finds out you've done it."—**Jon Schriber**



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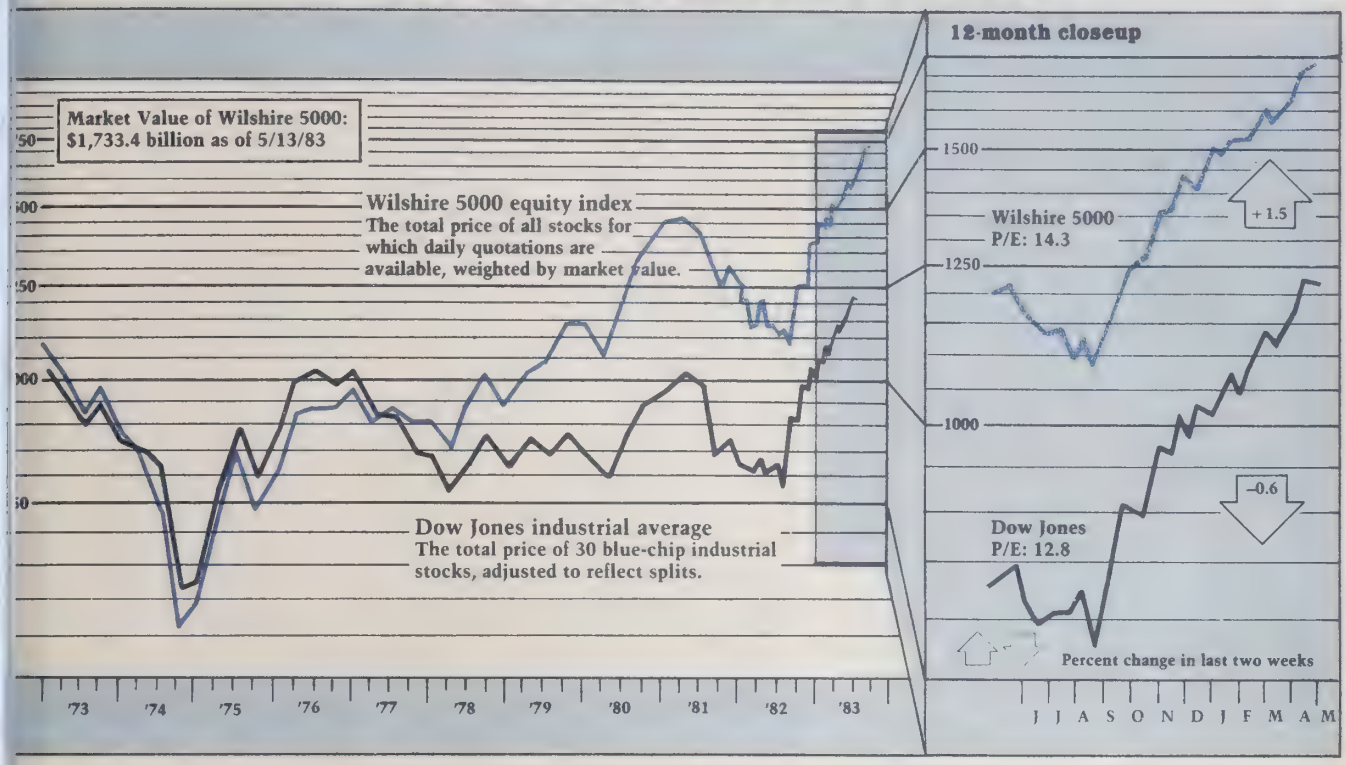


Nothing's perfect. The market showed some signs that the rally isn't quite ready to deliver investors to the promised land. The Amex jumped 6% over the last two weeks. NASDAQ issues were ahead 3.7%. And the broadly based Wilshire index indicates that the overall market gained 1.5%. Meanwhile, the P/E multiple on the Wilshire declined slightly—from 14.5 to 14.3—reflecting some improvement in corporate earnings.

The Dow industrials, however, did not share in the glory. They were off 0.6%. This could be a warning sign. Auto stocks buoyed the Dow, but Wall Street's love fest with Detroit was not enough to offset Kodak's disappointing quarterly results. In heavy trading Kodak ended up almost 11 points lower than it was just two weeks ago.

The Wilshire index shows the average issue is up 42.5% over the last 52 weeks, and 63% since the start of the rally.

Many shares, of course, have performed much better than the averages. But there are hundreds of overexposed companies like Kodak. Large price gains can quickly become a liability if earnings falter or a leading analyst turns bearish. The market has placed a great deal of faith in falling interest rates and an economic recovery. Should the indexes continue to move even higher, the slightest bit of bad news could touch off sharp downward swings.

Close-up On The Equity Markets

Performance of six leading indexes

Percent change	Wilshire 5000	Forbes 500[1]	Dow Jones industrials	NYSE Composite	Amex Market Value Index	NASDAQ Composite
in last 4 weeks	5.0	3.3	4.0	4.3	11.0	7.9
in last 52 weeks	42.5	38.5	42.1	39.6	62.0	61.5

Stock performance based on five key investor yardsticks

Percent change	Company size		Volatility[2]		P/E multiple		Dividend yield		Growth profile[3]		Share price	
	large	small	high	low	over 25	under 5	over 7.5%	none	high	low	over $40	under $4
in last 4 weeks	5.2	15.5	13.7	6.7	11.6	13.2	5.3	14.4	13.2	5.8	5.3	16.8
in last 52 weeks	42.9	116.1	107.3	52.0	78.1	124.6	42.9	123.4	117.8	52.1	56.2	109.2

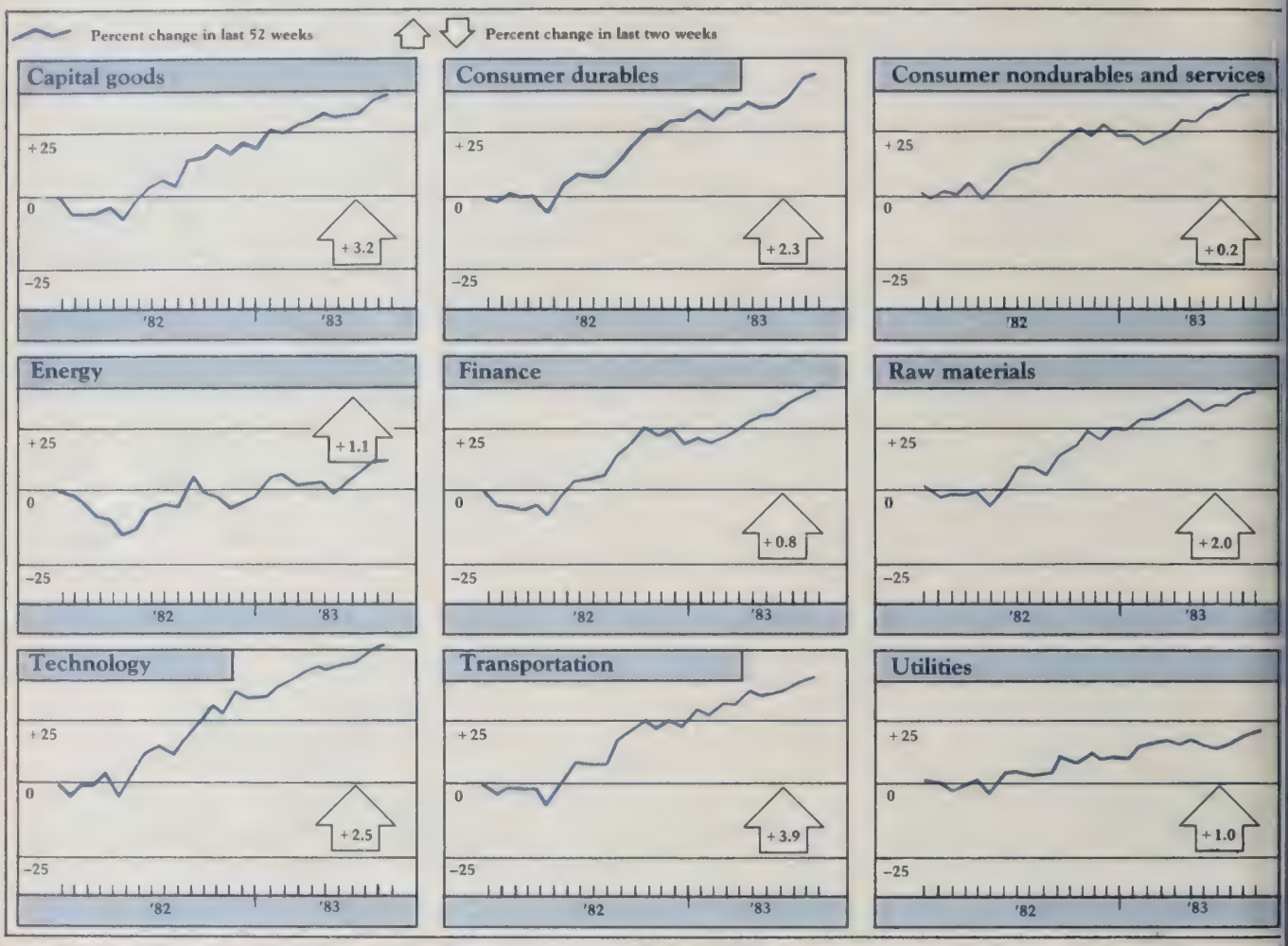
[1] Based on sales.
[2] A stock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations, low-volatility issues are more stable.
[3] A quantitative evaluation of a stock's growth image, determined by Wilshire Associates.

Note: All data for periods ending 5/13/83. Prepared by Wilshire Associates, Santa Monica, Calif.

Where The Action Is

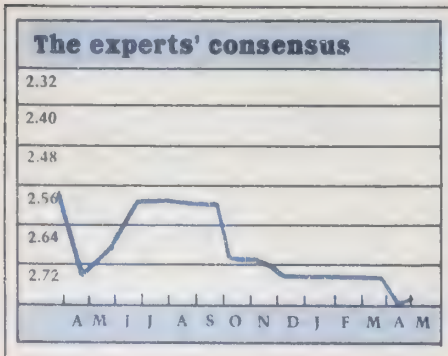
Out of focus. Weakness in the Dow, and one of its leading consumer nondurable stocks, Eastman Kodak, made sector performance only a bit blurry. Overall, the nine groups tell the story of a rebounding economy. Capital goods and consumer durables, two crucial groups, gained 3.2% and 2.3%, respectively. Transportation issues, however, flew above the pack with a 3.9% gain. Despite several dismal earnings reports and no apparent end to fare wars, The Street still has high expectations for airlines.

Energy stocks, up only 1.1%, underperformed the market. But on a positive note, the oils have sustained their upward movement since mid-March. This is beginning to look like the start of a long-term rebound, rather than a quick trading opportunity.



What The Analysts Think

Who's on first? The analysts, again, put utilities in first place. But in two-week performance, these stocks are well toward the bottom of the standings. Meanwhile, market star, consumer durables, sits at the end of the analysts' bench. Investors have been scoring most of the runs, though the analysts may end up winning the game.

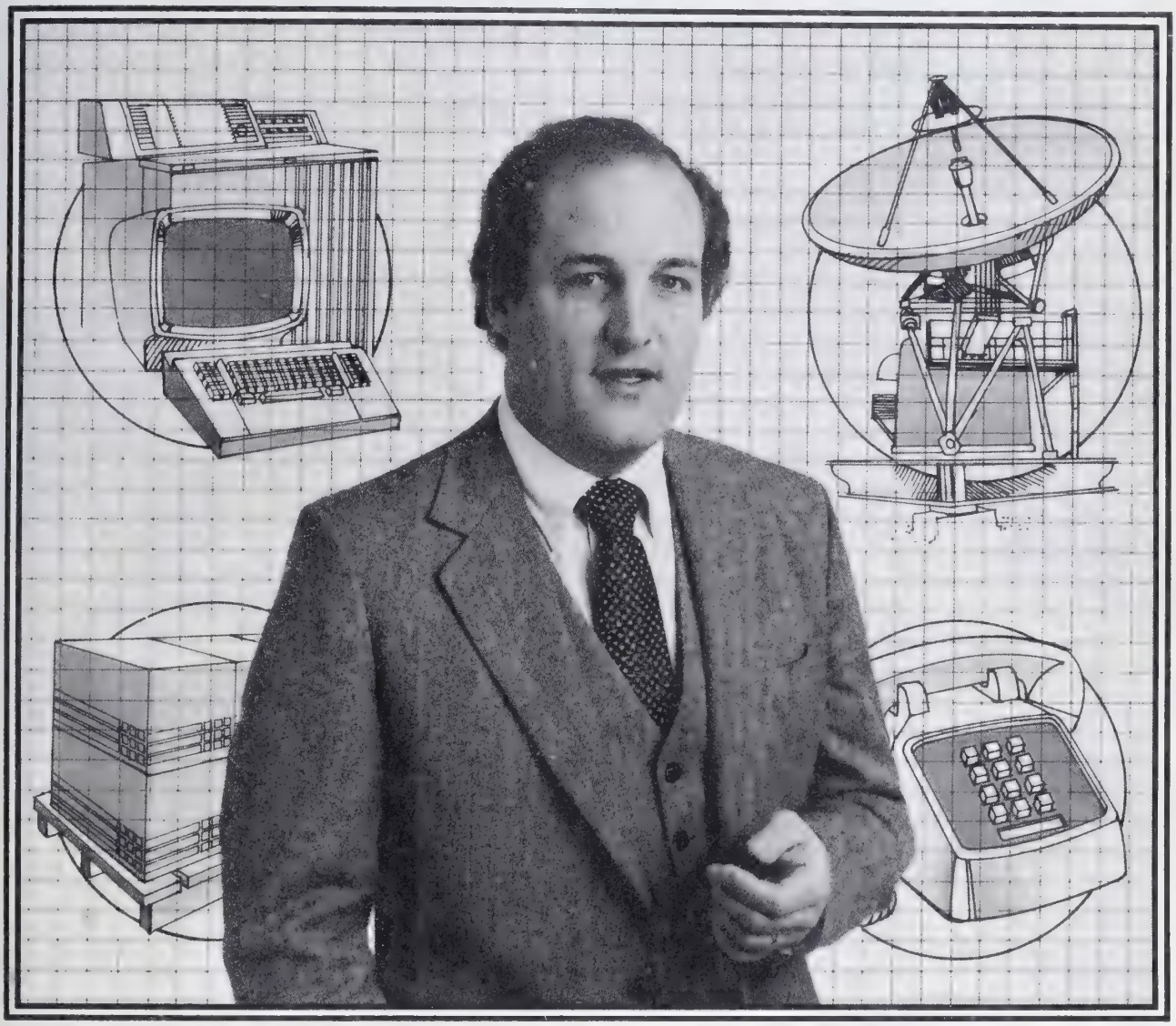


Rank	Sector	Current opinion	Rank 2 weeks ago	Rank 4 weeks ago
1	Utilities	2.62	1	2
2	Energy	2.75	2	1
3	Capital Goods	2.78	4	4
4	Technology	2.78	3	3
5	Raw materials	2.80	5	6
6	Finance	2.82	6	7
7	Transportation	2.86	7	5
8	Consumer nondurables	2.87	8	8
9	Consumer durables	2.90	9	9

Opinion ratings are ranked on a scale of 1 (strong buy) to 5 (strong sell). Data reflect the views of 200 institutional analysts. The consensus of opinion graph is the composite rating of 1,200 stocks, while the sector breakdowns correspond to industry groups graphed above. All figures are weighted for market capitalization.

Note: All data for periods ending 5/13/83. Prepared by Wilshire Associates, Santa Monica, Calif

"OUR FUTURE: BEING PURPOSEFULLY DISTINCTIVE."



Larry Mancini, *Corporate Planning, United Telecom*

The Information Age is here. And the race for dominance has begun.

With deregulation of telecommunications, the giants will be trying to get even bigger. The not-so-giants will challenge them . . . head on. And some will succeed.

But one company, United Telecom, will avoid a broadside confrontation.

We will concentrate on developing businesses where we're already making a unique contribution. We have formed a new communications company to capitalize on our unique capabilities in enhanced voice and data services.

Our telephone companies (situated in many population growth areas) are planning to bring more sophisticated services to the telephone user . . . becoming, in effect, the suppliers of localized communications service centers.

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Our intentions are clear. We will specialize. And by specializing, *we* will become an even more important part of the Information Age.

To learn more about how we're programmed for the future, write to D.F. Forsythe, United Telecommunications, Inc., Box 11315, Kansas City, Mo. 64112.

United Telecom

A clear, distinctive voice in the Information Age.

In this market, high-technology companies can provide more thrills than Pac-Man. But what if the game goes against you?

Wired for fun

By Paul Bornstein

THE PUBLIC IS ALWAYS captivated by technology. Tell the world your company deals in electronics, computers or is even remotely connected with video games and investors will beat a path to your door. Especially so these days.

This can lead to lofty P/Es. The DJIA, for example, is now selling at 12.8 times earnings. But Media General's data processing group is selling at an average of 19.6 times earnings and its electronics group is selling at an average of 27.8 times earnings—virtually discounting the hereafter, as the old saying goes.

That is a less spectacular gap than existed at the last market peak in 1981. Then the Dow sold at 8.2 times earnings, vs. 18.2 for electronics and 13 for business data processing companies. So, big premiums for high-tech stocks are nothing new. Especially so in a market that has produced big runups in smokestack issues where earnings are virtually nonexistent and strictly on the come. A good many high-technology issues are cheap by comparison.

The question is: Which high-technology stocks are worth the premium and which are not? All high-technology companies, for example, run the daily risk of losing out in the marketplace if a competitor introduces a better or cheaper semiconductor or memory device.

The following table includes information about some of the more successful high-technology companies with sales between $25 million and $250 million. Some of these companies, perhaps most of them, will eventually falter and fall, but at present they all have positive earnings and growth rates and thus could be less risky than their high P/Es suggest.

The column in the table labeled "P/E relative to 5-year growth rate" indicates market expectations of each firm. A higher figure indicates a greater level of investor optimism. Standard Microsystems, for example, is a manufacturer of microcomputer peripherals and leads the pack with 4,929%. "The company has not rebounded merely because of the expected recovery but because they have introduced one new product per month for the past year and a half and have a portfolio of valuable patents," says Robert Sullivan of Paine Webber.

Another potential winner is Convus Systems, which introduced the Winchester Disk storage system. It has a new product called Omninet which links personal computers, and will soon release a new microcomputer storage device. "Due to good management, the company can change just as quickly as the market," says Richard Hasloecher of Butcher and Singer.

Not surprisingly, most of the following firms are selling at or near 52-week highs. Sixty-one sell at a multiple of 26 or more, or at least twice the multiple on the Dow. As a group these stocks are much more volatile than the rest of the market. Tomorrow's Polaroid and Xerox are likely to be among this group of 9 firms. But so is tomorrow's Transitron *(see p. 200)*. ■

Born to be wild

These 92 high-tech firms have shown an ability to move fast and to make money. But the market is charging a large premium on most of these highly volatile shares. Over half the firms have betas greater than 1.50. Investors who already have difficulty falling asleep may want to look elsewhere.

Company/business	Price: recent	Price: 52-week range	Current P/E	P/E relative to: 5-yr growth rate	P/E relative to: S&P's 500	Beta	Return on equity
Adage/computer equip	52¼	52¼–16	31	70%	156%	1.92	25%
Adams-Russell/electronics	26⅛	27⅞–12	26	92	129	1.60	19
Alpha Industries/electronics	22½	24⅜–10¼	30	107	149	1.39	15
Altos Computer Systems/computer equip	23	39 –19⅜	45	41	224	NA	62
Analog Devices/electronics	27¾	28⅞–11	48	532	238	1.74	13
Analogic/precision instruments	61½	61½–23½	40	135	201	1.83	19
Andrew/telecomm equip	40¼	41½–20	25	84	126	1.02	19
Applied Magnetics/computer equip	31⅛	31½–12½	23	116	115	1.41	17
ARGOSystems/electronics	25	27½–14	32	87	159	NA	25
Atlantic Research/rocket motors, prec instr	55¾	55¾–19½	25	126	125	1.85	20
Augat/electronics	39	40½–20	32	226	158	1.35	24
Automatic Switch/electro-mag control equip	39	40⅞–26	22	242	108	0.70	19

NA: Not available.

Sources: William O'Neil & Co., FORBES

nesimus Robi, coffee farmer, talking about his son Francis Mburu, sales manager at Henkel Kenya.

For our people here, Henkel is almost like a second village."

's like uprooting a coffee shrub. hat's how Kenyans feel when they e forced to leave their home villages. et the soil here cannot feed us all. , many young people have had to ove from their villages. My son, r example.

om the rural village to a large city e Nairobi and Henkel – these are st worlds apart. And yet everything rned out fine. One reason for this that companies like Henkel don't nply come along looking for cheap bour. No, they really care for the ople working for them. To begin th, Henkel arranged for the most portant thing of all, a flat. Here ancis Mburu can feel truly at home. hen, Henkel sent him for an on-the- o trainee program to Europe and geria.

Meanwhile he has become a manager in the Henkel sales department. He has a lot of travelling to do, selling industrial cleaners to customers such as dairies, breweries, hotels and so on. Therefore, he has to go on safaris very often – this is what we call these business trips.

I know the people Francis Mburu works with. I invited them to my small coffee farm. And drinking homemade beer we had a wonderful time, chatting late into the night.

A thing I have come to realize is that our traditions and modern industry can exist side by side. That is provided people are treated with due respect.."

My son Francis Mburu.

Henkel Kenya Ltd., Nairobi, is one of more than 100 companies of the Henkel Group, situated in more than 40 countries. Worldwide sales over 9 billion DM. 34,000 employees. Headquarters Düsseldorf, Federal Republic of Germany. Product range includes laundry products, household cleaners, cosmetics, adhesives, industrial cleaners, oleochemicals, auxiliary products for textile and leather industries. Over 8,000 products for all walks of life.

Henkel

Chemistry working for you.

Born to be wild

Company/business	Price: recent	Price: 52-week range	Current P/E	P/E relative to: 5-yr growth rate	P/E relative to: S&P's 500	Beta	Return on equity
Avantek/electronics	26½	27⅞–11⅞	43	116%	212%	1.45	20%
Aydin/telecomm, computer equip	53¼	54¾–17¼	21	71	103	1.74	26
Burndy/electrical equip	26	26½–15⅝	26	371	129	0.97	20
CPT/computer equip	23⅞	26⅞– 9¼	23	52	113	1.64	22
C3/computer equip	22	22⅜– 8	24	46	120	0.57	24
Calif Microwave/telecomm equip	33¼	34⅛– 9½	36	273	177	1.68	16
Cobe Labs/health care equip	48	48 –20½	16	163	81	1.20	13
Communications Inds/electronics	34	34¼–17¼	32	132	158	1.81	19
Computer & Commun Tech/computer equip	23¼	33½– 9⅞	48	184	238	1.97	16
Computer Assoc Intl/computer software	27¼	28¾– 8½	46	27	228	1.57	54
Computer Products/electronics	18	18⅛– 6⅝	37	216	183	1.65	17
Conrac/precision instruments	18⅜	19⅜–11⅜	10	21	52	1.52	7
Corvus Systems/computer equip	19¼	23 –10⅞	45	27	222	1.23	33
Cray Research/computer equip	43¾	49½–20	31	71	154	2.06	16
Cullinet Software/computer software	39⅛	40½–12	53	124	264	2.09	23
Curtiss-Wright/industrial machinery	45¾	52 –32⅝	11	26	53	1.36	21
DST Systems/computer software	35½	35¼–24¼	36	41	180	NA	57
Dynatech/precision instruments	33¾	34¼–11½	26	112	128	1.37	23
Dysan/computer equip	26½	27¼–10⅞	48	268	239	1.45	9
Electrospace Systems/electronics	33	33 – 9⅜	48	98	238	1.89	41
Elscint Ltd/precision instruments	24¼	29 – 7¾	26	20	131	1.18	26
Esterline/precision instruments	26½	29⅝–12¾	28	107	139	1.92	12
Evans & Sutherland Comp/computer equip	42½	50½–19¼	39	88	192	2.04	28
Floating Point Systems/computer equip	33	38⅜–16	26	68	128	1.18	19
John Fluke Mfg/precision instruments	28¼	28⅞–13¼	25	2,478	123	1.15	11
Gandalf Technologies/computer equip	13⅞	22⅜–10¼	23	38	115	1.41	29
Gerber Scientific/computer-aided D&M	19⅞	19⅞– 6½	36	301	180	2.93	9
HBO & Co/hospital computer svcs	31¼	32¼–12¾	48	115	239	1.34	29
ISC Sys/computer equip	16⅛	21¼–10¼	49	45	243	1.31	28
Impell/svc to nuclear industry	30¼	30¼–14½	13	36	65	1.80	32
Informatics Gen/computer equip & svcs	29⅞	31¾– 9½	20	24	98	1.99	20
Infotron Systems/computer equip	35½	38 –10	44	337	218	2.28	8
Joslyn Mfg & Supply/electrical equip	28¼	33¼–19	11	32	54	0.90	17
Kollmorgen/precision instruments	27⅝	28⅞–15	32	454	158	1.63	18
LTX/precision instruments	16¼	17 – 6⅛	43	89	212	0.63	20
Liebert/computer equip	22	28 –11	31	74	154	1.56	22
Magnetic Controls/telecomm equip	18¼	19 – 8⅜	24	88	118	1.53	13
Management Science Amer/computer software	27¾	28¾– 9⅝	53	114	265	2.04	24
Matrix Corp/precision instruments	42	43½–15⅞	42	47	211	1.39	20
Matrix Science/electrical equip	27	29½–13¼	22	54	107	1.89	34
Micom Sys/computer equip	41	41¼–11½	45	39	221	1.80	34
Molex/electrical equip	54½	54¾–25½	27	150	134	0.83	24
Moog C1 A/aerospace	17	17¾– 8⅝	33	363	162	1.65	9
National Computer Sys/computer equip	27½	27¾–10¾	21	423	105	1.74	20
Pacific Scientific/precision instruments	33	33⅛– 8	19	94	93	1.82	25
Pansophic Systems/computer software	23¾	25¼–10	33	92	164	1.17	38
PAR Technology/computer equip	26	29½–19¾	44	51	219	NA	83
Paradyne/computer equip	27⅛	35⅞–15¾	23	32	112	2.23	17
Plantronics/electronics	18	27¼–15¼	13	254	63	1.08	14
Printronix/microcomputer prntrs	27½	34 –17	18	63	91	1.90	18
Regency Electronics/electronics	27	27½– 7¾	27	303	136	1.50	13
SCI Systems/electronics	46¾	47¾–12⅛	47	134	232	2.63	15
SEI/bank computer svcs	32¼	32¼–10⅝	42	144	208	1.70	17
Scitex Ltd/computer equip	24¼	27½– 8¾	30	272	149	1.42	16
Shared Medical Sys/hosp computer svcs	37⅜	37⅝–13¾	40	173	198	1.39	30
Simmonds Precision Prods/precision instr	38½	39⅞–12½	16	160	80	2.09	20
Sparton Corp/electronics	35½	36⅞–11¼	12	40	60	1.31	15
Standard Microsystems/electronics	26⅛	26¼– 7⅞	49	4,929	245	1.88	5
Systematics Inc/bank computer svcs	40¼	44¼–18¾	46	110	230	0.88	25
TIE Communications/telecomm equip	57¼	59 –14⅜	42	54	208	2.27	25
TRE/aerospace	34	35⅛–12	33	1,111	166	1.87	6
Tandon/computer equip	24¾	25⅝– 6	49	55	241	2.14	25
Tech-Sym/electronics	22⅝	22⅞– 7⅞	27	104	134	2.11	18
Telecom Plus Intl/telecomm equip	26¾	31 –11	37	57	182	1.30	13
Teleflex/precision instruments	37⅛	37¾–16⅛	21	65	106	1.72	26

NA: Not available

Sources: William O'Neil & Co. FORBES

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May 13, 1983

$350,000,000

Warner Communications Inc.

$125,000,000 10⅞% Subordinated Debentures due June 1, 1995

Price 99.15%

Plus accrued interest, if any, from May 18, 1983

$225,000,000 11½% Subordinated Sinking Fund Debentures due June 1, 2013

Price 100%

Plus accrued interest, if any, from May 18, 1983

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DEAN WITTER REYNOLDS INC.

Born to be wild

Company/business	Price: recent	Price: 52-week range	Current P/E	P/E relative to: 5-yr growth rate	P/E relative to: S&P's 500	Beta	Return on equity
TERA/computer equip	31	31 –12¾	39	93%	195%	NA	40%
Texscan/electronics	23¼	26 – 9¾	28	47	139	1.98	17
Thermo Electron/indl machinery & instrs	28½	30¾–11⅜	48	1,188	236	1.60	12
Timeplex/computer equip & svcs	22¾	25½– 6¼	49	275	246	2.52	6
TransTechnology/aerospace	20¼	20½– 8⅝	14	33	70	1.64	22
Triad Sys/computer equip	23½	27¼– 9½	49	213	243	2.37	8
Ultimate/computer equip	23¼	24⅜– 6¾	34	22	167	1.85	40
Unitrode/electronics	55¼	55¼–24¾	25	101	126	1.51	22
Universal Comm Sys/telecomm equip	18¼	19 –13⅝	37	91	181	1.42	16
Veeco Instruments/precision instruments	29¾	30¼– 9⅜	32	1,078	161	2.36	15
Vernitron/electrical equip	16½	16⅞– 7¼	17	139	83	1.94	18
Watkins-Johnson/electronics	75¼	76 –30	22	103	108	1.45	14
Western Pacific Ind/precision instruments	70	70 –50½	14	706	70	0.87	29
Whitehall/precision instruments, aerospace	50½	50½–15½	20	37	98	1.85	38
XEBEC/computer equip	28	28¼–20	38	126	188	NA	70

NA: Not available.

Sources: William O'Neil & Co.; FORBES

The Funds

Long-term performance is important in choosing a mutual fund. But not if the guy who made that record is lazing on a beach.

Know the men behind the numbers

By Barbara Rudolph

MONEY MAY BE ROLLING into mutual funds these days, but the sales pitch is the same as always: "Come on, poor investor, you don't have the expertise or the energy to pick stocks. Let our wisdom work for you."

Behind the salesman's patter, however, is this cold reality: When you buy shares in a mutual fund, you are buying the judgment of the manager running the portfolio. Ten-year track records are well and good, but not if the clever fellow who bought and sold the stocks is now lazing on a beach.

Identifying a portfolio manager isn't always easy. A prospectus must name the fund's officers, but not necessarily the individual who makes investment decisions. And even when the manager is designated, if he quits or retires, the departure often isn't acknowledged in a quarterly report. "The industry has resisted this disclosure because it implies that the fund turns on one guy," says one fund manager—anonymously, of course.

But many of the best funds really are one-man shows. Consider the classic case of Emory deVegh. His funds were top-notch performers in the Fifties and until he died in the early Sixties. They have been also-rans ever since. Much the same with the Over-the-Counter Securities Fund, which was well regarded in the late 1970s and has only kept up with the competition since manager Ralph Coleman died suddenly, two years ago.

Sometimes a good track record can lead to job offers and leave shareholders to evaluate brand-new investment managers. There have been at least two notable moves during this bull market: Take Philip Hempleman, who ran the hot Oppenheimer Target Fund, a capital appreciation fund that was introduced in January 1981. It rang up an

This year, TIME The Weekly Newsmagazine begins its 61st year of publication. Since TIME was founded in 1923, the world has moved from the T-model Ford to the space shuttle *Columbia;* from the crystal radio and silent movie to live telecasts from the surface of the moon. People, nations and institutions have been born and others have disappeared. TIME has recorded it all—and today continues to record for nearly 30 million weekly readers around the world the changes that affect their lives. In fact, more people in more countries now get their news from TIME than from any other single source.

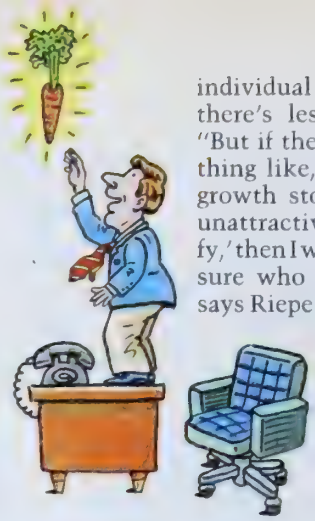
"If the prospectus says something like, 'We'll invest in small growth stocks, but if they seem unattractive, the fund will diversify,' then I would want to be damned sure who is running the show."

impressive 113% return on assets over the past year ending March 1983.

Propelled by that success, Hempleman left Oppenheimer last October to become a managing director of the Trust Company of the West, a Los Angeles-based investment firm that has a total of $5 billion in assets—mostly pension money—under management. Hempleman will be personally supervising some $650 million in equity portfolios.

And five months ago Gary Capen, who had been running the St. Paul Growth Fund for the past 15 years, quit to form his own investment firm with Jim Jundt. St. Paul was on the FORBES 1982 Honor Roll and had a 61% return from March 1982 to March 1983. Whether shareholders in both these funds should jump ship or not remains to be seen.

Many funds, of course, have largely predetermined investment strategies. A prospectus can require, say, 100% of assets to be in small technology companies. In situations like this, counsels James S. Riepe, director of the mutual funds division at T. Rowe Price Associates, an investor should be less concerned about who the individual manager is. After al there's less room to maneuve "But if the prospectus says some thing like, 'We'll invest in smal growth stocks, but if they seem unattractive, the fund will diversi fy,' then I would want to be damne sure who is running the show, says Riepe.



On the other hand some big manage ment companie strive to create an at mosphere where port folio strategy reflect the organization rath er than the man. Her investors are safer, so the argumen runs, because no individual is respon sible for performance. "At groups lik Keystone and SteinRoe it is structur that is significant," says Michae Knoll, a consultant who runs Hubri Research Corp.

Consider Arnold Bernhard, the 81 year-old founder of Value Line, which is in the midst of its first public offer ing. Bernhard by all accounts has cre ated a system for stock-picking tha seems likely to survive his departur from the firm.

But simply being part of a big man agement company doesn't mean a fund can't operate independently. Fidelity's Magellan Fund, the top equity perform

Here's the past; what's the future?

People who sell mutual funds don't like to admit that performance might be dependent on the health or professional happiness of any one person. Here are 19 equity funds with $100 million or more in assets that are closely identified with well-known money managers. Each has been on the scene for at least ten years. No stock picker functions in a vacuum, of course, but these are without a doubt key men. The career performance records in the last column—calculated independently by each fund—indicate investing may be one business where experience counts. Whether shareholders will prosper when these battle-scarred veterans leave is anyone's guess.

Name of fund	Assets (millions)	Manager	Age	Years with fund	Compound annual return
Affiliated	$2,000	John McCarthy	56	11	12.6%
AMCAP	835	James Fullerton	66	16	12.8
American Investors	152	George Chestnutt	68	25	8.9
Bullock	157	Hugh Bullock	84	50	12.1
44 Wall Street	230	David Baker Jr	49	14	15.0
Guardian Mutual	302	Roy Neuberger	79	33	12.4
International Investors	704	John van Eck	67	28	15.1
Janus	213	Thomas Bailey	44	13	19.1
Lindner	247	Kurt Lindner	61	29	25.6*
Mutual Shares	210	Max Heine	72	33	13.0†
Nicholas	148	Albert Nicholas	52	14	13.0
Pioneer	1,329	Philip Carret	86	55	12.9
Scudder Development	228	Edmund Swanberg	61	12	14.7
Seligman Capital	102	Fred Brown	69	13	14.6
Templeton Growth	797	John Templeton	70	29	14.7
20th Century Select	350	James Stowers	59	12	22.2
Value Line	160	Arnold Bernhard	81	33	11.7
Vance, Sanders Special	132	Landon Clay	57	14	10.3
Windsor	1,491	John Neff	51	19	12.8

*Figure covers public years, since 1973 †Figure covers last 30 years only.

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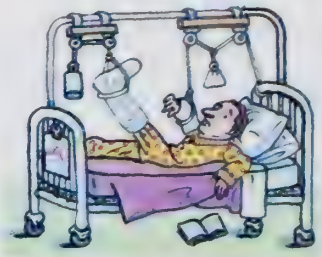
er last year, is managed by 39-year-old Peter Lynch, and it's everyone's example of a portfolio that is one man's baby. "When you have a stock picker like Lynch, his ability is very hard to institutionalize," says Price's Riepe.

The T. Rowe Price organization, in fact, is a classic case of just such a failure. A lot can go wrong when a fund's founder—and stock picker par excellence—retires. Price left full-time work at his firm in 1971, and since then his Growth Stock Fund has posted a pathetic 44% return for the ten years ending in March. That is one of the worst long-term records of any equity fund.

Do transitions always have to be so awkward? Not really. Sometimes a fund is lucky enough to have an able assistant ready to take over where the



Transitions don't have to be awkward. Sometimes a fund has an able assistant ready to take over. "And there's often a tribal law at work even when the head honcho leaves," says Stollar of Vickers Associates.

old master left off. Explorer Fund, for example, a well-known growth stock fund, was managed by John Granahan for eight years. Granahan's aide, Frank Wisneski, took over in 1979. "And he didn't miss a beat," says one competitor. "There is often a tribal law at work even when the head honcho leaves," says consultant Michael Stollar of Vickers Associates Inc.

One final point: Fast turnover of fund managers is not necessarily bad. Consider T. Rowe Price's New Horizons Fund, a top performer recently, with a five-year average return of 26%. The fund has run through three portfolio managers in the past three years, and still shareholders have done very well.

Choosing a fund, then, is no different from making any other investment decision. There are no surefire rules. But shareholders should remember that mutual fund track records depend on people, and it's essential to know who the runners are. ■

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A red-hot semiconductor stock back from 1959 isn't so red-hot these days. In fact, it doesn't even sell semiconductors.

Remember Transitron?

By Ellyn Spragins

IT WAS THE FAIRY TALE stock of the early 1960s, the stuff of which boardroom tape watchers dreamed. There were commitments to buy out the shares in its first public offering in 1959 even before the offering was registered with the Securities & Exchange Commission. Transitron, clearly, was another Texas Instruments.

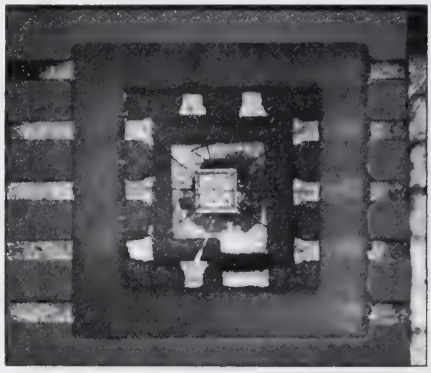
With all the touting and hoopla surrounding the company, it was hardly surprising that its share price rose. First offered to the public at $36 a share—42 times 1958 earnings—in December 1959, Transitron shares quickly rose to 45. By June of 1960, the price had reached 60. That's 56 times earnings, a multiple considered acceptable today by some hot-stock investors.

But the market ran out of greater fools. Today, Transitron sells for around 5½, and at its nadir in 1978 scraped bottom at ¼. Yet this was the stock of a profitable concern, underwritten by Merrill Lynch during the course of the first great technological breakthrough in semiconducting, the development of the transistor and the semiconductor diode. Investors lost millions.

Transitron was started in 1952 by the late Leo Bakalar, of Massachusetts, a Depression-era high school dropout who had worked his way into the plastics business, and his younger brother, David, a graduate of MIT. David had worked at Bell Laboratories, where the transistor was invented. In 1953 the one-year-old Transitron produced a gold-bonded diode that could outperform other diodes, and the Defense Department approved it for military electronics. That was enough, later, to catapult Transitron into the market's blue sky.

Leo and David were sellers of stock in both of Transitron's two public offerings, from which they walked away with about $56 million after taxes. Much of the money went into blue-chip investments and art, but some also went into government bonds (losers) and into loans to Transitron (not a winner).

But even as Transitron stock was bid up by the public, Transitron headed for near collapse, although no one knew it at the time. Everybody was getting into the semiconductor business, and not all the competition was transitory. Texas Instruments, General Electric, RCA and other heavies began to throw their weight around. Transistors and diodes that once sold for more than $1.50 each were fetching only 80 cents. By 1961 Transitron was losing money, and the stock earned the distinction of the poorest performance of all issues listed on the New York Stock Exchange.



Semiconductor circuit circa 1960
Greater fools loved it.

After being punched down to little-guy status, Transitron never regained its high place in semiconductor electronics. At times during the 1960s and 1970s, its earnings and its share prices moved upward, only to fa back again because of competiti pressure or losses from blah acquis tions, the fruit of diversification. De termined not to build Transitron o semiconductors alone, the Bakala acquired over a dozen companie Some fit, but others, including a ter and canvas maker, and a manufactu er of cabinets for television and stere sets, did not. Transitron became n so much a conglomerate as a simpl hodgepodge scattered in dozens of l cations, and it was too much for th Bakalars to deal with.

While sales grew slowly during th 1970s, the company lost money unt 1978. The Bakalars made their con pany a $21 million personal loan t keep the firm together. Several acqu sitions were sold. Others shut dow Transitron kept slugging away i semiconductors.

David Bakalar remembers it thi way: "We struggled with semiconduc tors and we actually tried to produc some of them overseas, but we ha problems. You've got to be at the ver top of the technology, and even if yo are, it doesn't mean you're makin money. It was a long bitter struggl before we finally decided we were be ter off to put our resources in othe devices."

In 1978, with its stock selling—when it sold—at $1 and less, and wit yearly sales of only $35 millio Transitron finally dumped the sem conductor business. Today, in W burn, Mass., Transitron makes cabl and interconnecting electronic pro ucts for cable television, telephone computers and the aerospace indus try, and is expanding into fiber opti systems. That's real glamour, isn't it But then, so was semiconductor And so was Transitron.

The curious thing is this: Trans tron has, in a way unanticipated b glassy-eyed speculators of the 1960 become a success. Its sales hav reached $100 million a year, profit around $6 million, and sales at leas are increasingly healthily. But thos new-issue buyers in Transitron ar still losers.

A stampeding stock market make nearly everyone happy and some pe ple downright giddy. The year 198 promises a record flood of new issue and if the past is any guide, only a fe of them will survive even as well a Transitron. Yet investors and specula tors have snapped up practically ever new issue to grind out of Wall Street' underwriting mill.

Remember Transitron? Who want to, when the next buyer is a greate fool? ■

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Can a divorcée make better investment decisions than her ex-husband? She just may, if she follows these suggestions.

DEAR BEN...

By Ben Weberman

A recently divorced 54-year-old woman from a small East Coast town has written me for advice. How, she asks, can she show up her ex-husband by putting her settlement to work in the bond market.

To do that she'll need to speculate a bit. That rules out conventional no-load bond funds (*see p. 60*). Her relatively small capital also rules out buying issues directly, since that makes little sense with less than $100,000 to play with.

Instead, let me suggest two mutual funds that invest in bonds and stand a good chance to outperform the overall market. One invests in taxable bonds, the other in tax-frees. If you are in a 35% or higher marginal tax bracket, you will probably do better in the latter; otherwise, the former. Unfortunately, both are front-end load funds, which charge commissions that wipe out part of the first year's return. Nevertheless, they have interesting features that may make them worth the extra cost.

Each fund has an unusual strategy. The taxable $1.1 billion IDS Bond Fund will use interest-rate futures to increase yields. The tax-exempt $320 million Kemper Municipal Bond Fund enhances its yield with profits reaped from advance refunding of state and local government securities.

Ted Busboom is portfolio manager of the IDS Bond Fund, which had a recent 31-day yield of 11.75%. His portfolio is so large, he explains, that it is difficult to restructure it rapidly. "Say we want to move from the fully invested position we have now to 10% cash equivalent. That means more than $100 million must be shifted. Because our average holding is $4 million, we would have to sell about 25 separate issues—something that could take up to two months in a weak market."

To improve flexibility, Busboom has received shareholder approval to hedge. He can now restructure in minutes by going short an equivalent amount of Treasury bond futures contracts. Since the Chicago Board of Trade crosses 60,000 to 80,000 bond contracts a day with an underlying principal of $6 billion to $8 billion, the IDS sale would hardly dent bid and offer levels.

With the short, Busboom has protection against adverse market moves. If bond prices fall, his profit from the short sale of T bond contracts limits the damage. Of course, if rates rise, the fund will have to put up more margin. But portfolio gains balance the loss. The cash risk: If prices are rising, it may be necessary to post additional maintenance margin, possibly daily. Still, Busboom thinks the ability to hedge will help his trading profits.

Don't confuse this strategy with that of speculators who deal on their own in interest-rate futures. Busboom is a legitimate hedger and they aren't. He expects to be in futures only to avoid moving the market by covering his big positions. Whether the strategy works depends on how sharp Busboom is in calling major market turns.

Now look at the Kemper fund, which has a 30-day tax-exempt yield of 8.73%. Its edge comes from a portfolio of high-coupon bonds that are prime candidates for advance refunding. I explained this concept in a previous column (FORBES, *Apr. 11*).

Tax-free borrowers who are not yet able to redeem outstanding issues because of call protection have a technique to get around that restraint. They sell a new issue. Then they use the proceeds to buy Treasuries or similar securities.

What's in it for the old bondholders? Quite a bit. The Treasuries become collateral for the older bonds, which are now effectively U.S. government-backed securities instead of just ordinary municipal bonds. Such older issues with prerefunding collateral have jumped from A or Baa ratings to Aaa almost overnight, with gains of as many as 12 or 13 points in price, up 10% or 12%.

That's why scouting for prerefunding candidates can be profitable. But it's too time-consuming for most individuals. Enter Robert Butler, portfolio manager of the Kemper Municipal Bond Fund. He took on a portfolio of single-A, high-coupon bonds before last summer in anticipation of prerefunding.

Those changes began late last year, and the pace is now picking up. About half his portfolio, however, is still eligible for prerefunding, even though bonds worth $20 million, 6.3% of the fund's total assets, have already benefited.

Here's how a typical situation can work. Butler purchased $2 million of 13.2% Oklahoma City Airport Trust junior lien bonds in November 1981 at a price of 99. Before that issue was advance refunded last December, the price had mounted to 112. After the prerefunding announcement, however, Butler's bonds moved up to 125, and they now trade at 132.

Butler isn't guaranteeing anything, but he thinks more prerefundings are likely. Perhaps, he says, they will raise his portfolio by 10% in market value. There are no sure things, but I think this is a low-risk, high-potential gamble.

So back to our letter-writing divorcée. If you want to take a bit of risk and like high yields with the potential of fat capital gains, either of these funds is a good bet. ■

Ben Weberman is economics editor of FORBES *magazine*

The key to a successful business is good management. But the problem is: How do you get good management?

DO YOU KNOW YOUR METES?

By Thomas P. Murphy

What do you look for in a venture capital investment? Any venture capitalist will tell you that the first quality is management, then management and management. And what qualities should management have? Well, intelligence, high energy level, knowledge of the industry, motivation, leadership ability, etc.

All of this is revealed truth. Unfortunately, revelation ends there. Every venture capitalist knows he has put some absolute turkeys into business and with disastrous results. Why do people who pride themselves on picking management so often fail in their choices?

Carole Cushing, 44, of Cushing & Cushing of Santa Monica, Calif. and New York City, would tell you that if there is a single reason, it is the failure to probe for weaknesses in candidates as well as for strengths. Says Cushing: "Interviewers focus on what it takes to be successful and not enough on why chief executives fail in their jobs."

Carole Cushing and her husband, Bryant, accept the conventional list of virtues and add some of their own. Then they probe for the potentially fatal flaw, and that is what distinguishes their approach. First among these potential flaws is a failure among people to know who they really are. "They don't know the metes and bounds of their own limitations," says Bryant Cushing, 55.

To illustrate, he tells the story of Herald, the amazingly successful founder of a West Coast chain of supermarkets. Herald's stores were no better situated than his competitors' and were no more efficient. But Herald was a genius at merchandising. Something exciting in his stores always brought the customers in and kept them coming back. It was all working beautifully until one day on a plane Herald sat beside the senior partner of a big Wall Street firm. Before the flight ended, the two had agreed to take Herald's company public.

With the new millions and the new prominence, Herald graduated from supermarket president and superb merchandiser to financier, and bought chains of stores in other fields. He was chosen for gubernatorial and presidential commissions, but, says Cushing, "While all this was happening, the merchandising in Herald's stores became 'me, too' and, eventually, Herald's whole empire failed. Herald wasn't a financier, he was a merchandiser, and his failure to understand that about himself ruined the businesses."

The Cushings believe a second critical quality is, as Carole Cushing puts it, "the ability to confront others; the ability to say 'no.' Would the candidate be able to say to his best friend: 'I'm sorry, but the company has outgrown you.'?" If not, he could be a menace to a company.

The third point on the Cushings' list of realities is the ability to see people and situations as they really are. They try to identify and weed out people who have unrealistic expectations about their businesses. "How can you compete in a market," asks Bryant Cushing, "if you don't see that market for what it is?"

The Cushings are unimpressed with business' selection techniques. Usually, they find, interviewers have not done much homework—checked references, for example. Quite a lot can be learned from references even though the Cushings assume they are friendly to the candidate. As an example: "You can ask if the candidate would find it difficult to fire somebody," says Bryant Cushing. If several references hesitate on a question like that, or say they think he or she would have problems, then the candidate may not be chief executive material.

Interviewing techniques also present problems. The worst, the Cushings say, is the law firm approach: Job candidates spend exactly one-half hour with every partner. A year later, the partners meet to ask themselves what went wrong.

Usually, the Cushings work as a team and interview in depth. By having two interviewers in the room, they say, one can concentrate on asking questions while the other listens carefully for the answers.

Curiously, Bryant Cushing, who has been helping businesses pick chief executives and structure management teams for 20 years, has none of the psychology or personnel degrees you would expect. He is a Yale graduate in English literature (who else would use a nice, archaic term like "metes" for "limits, boundaries"?) and learned his art, he says, from Norton Simon. "Norton Simon," says Cushing, "is thought of as a financier, but his greater genius was personnel. After talking to a man for a couple of hours, he could predict what the man's breaking point would be. And he would be right."

Bryant Cushing figures he has been through all of the cycles, beginning with the 1960s chief executives who watched the stock market instead of the business, through to his current work with venture capitalists and high-technology companies.

And he has learned what everyone selling a service to venture capitalists soon learns: Venture capitalists hate to pay for services with cash, but they are happy to pay with stock. "We already have stock in six small companies," Bryant Cushing says, "and we figure that's going to keep us in our old age." ■

Thomas P. Murphy heads a venture capital firm, Partnership Dankist, Stamford, Conn

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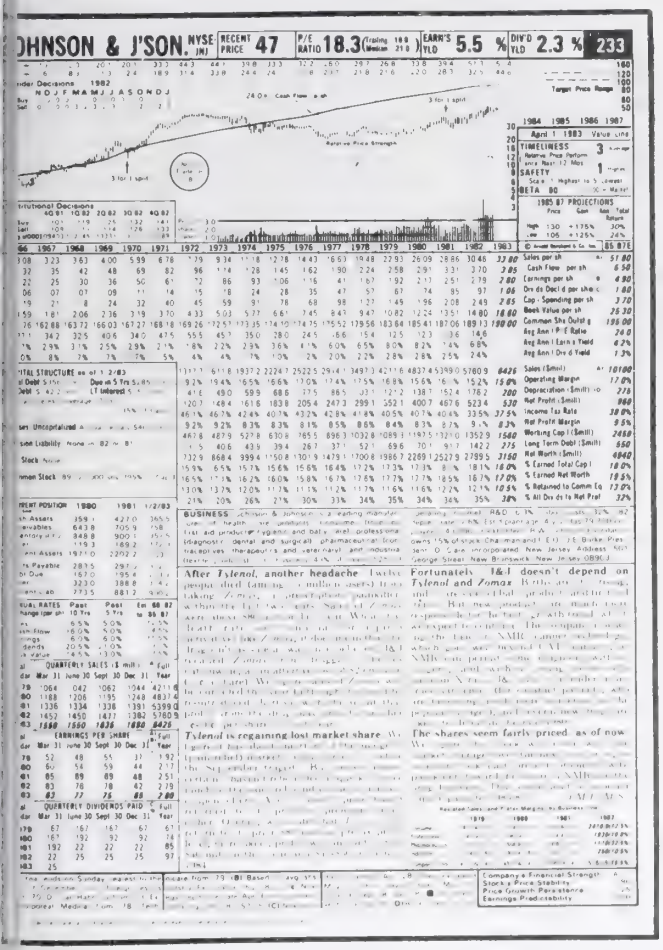

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AMETEK, INC. N

AMETEK REPORTS RECORD FIRST QUARTER EARNINGS; WILL PURCHASE ITS OWN STOCK

PAOLI, PA., April 19, 1983—AMETEK, Inc. (NYSE—PSE) reported today that its earnings for the first three months of 1983 were 69 cents per share, making this the most profitable quarter in the industrial manufacturer's history.

AMETEK's first quarter net rose 8 percent to $7.6 million a record for any quarter in the Company's history, equivalent to earnings of 69 cents per share on sales of $104.6 million, compared to the first three months of 1982 when the company earned $7 million or 64 cents per share and sales totaled $110.7 million.

"The cost cutting programs begun almost 18 months ago and the plant consolidations completed in 1982 contributed to the improved results achieved in the quarter just completed," AMETEK's President, Robert L. Noland, reported. "The slight upturn in new orders which began in the last quarter of 1982 is a continuing trend," he added. "With sales in the first quarter of this year approximately 13 percent higher than those of the preceding quarter."

Noland also announced that his company would begin to repurchase shares of its own stock. "AMETEK's Board of Directors has authorized the company to purchase from time to time shares of its own stock for option programs and other corporate purposes," Noland said.

	Three Months Ended March 31	
	1983	1982
Sales	$104,638,000	$110,658,000
Net income	7,561,000R	7,012,000
Earnings per share	$.69	$.64
Average shares outstanding	10,985,541	10,891,049

In the last four consecutive quarters AMETEK earned $2.55 per share.

R-record quarterly income.

(Contact: Darrah E. Ribble, Jr., AMETEK, Inc., Station Square Two, Paoli, PA 19301. Phone: (215) 647-2121.)

AMETEK, INC. N

AMETEK TO BUY MICROFOAM PACKAGING MATERIAL BUSINESS FROM DU PONT

WILMINGTON, DELAWARE, April 26, 1983—AMETEK, Inc. (NYSE-PSE) announced today that it had reached agreement to purchase the Microfoam plastics packaging materials operation in Wurtland, Kentucky from the Du Pont Company for more than $11 million cash. According to Dr. John H. Lux, AMETEK's Chairman, Microfoam sales totaled about $16 million in 1982. Dr. Lux told stockholders at AMETEK's annual meeting in Wilmington that the two companies expect to complete the transaction within ninety days.

AMETEK said it was purchasing duPont's Microfoam business, including the 110,000 square foot plant on 16 acres in Wurtland, an Ashland Kentucky suburb. Microfoam is a low cost, ultra light-weight flexible packaging and shipping material widely used to cushion electronic components, appliances and furniture shipments. A chemically inert material, Microfoam is also used as protective packaging for food products and fresh produce, and its thermal insulating qualities have made it a specified barrier material in construction, including roofing membranes and concrete curing applications. Marketed through a nation-wide distributor organization, Microform has replaced paper and corrugated materials in many shipping and mailing applications because of its superior cushioning properties and ultra-low density—a ten-square foot sheet of one-eighth-inch thick Microfoam weighs only one ounce.

Dr. Lux said that AMETEK plans to continue the Wurtland, Kentucky plant operations as a separate division, and expects to expand the marketing of Microfoam with more technical applications utilizing the material's anti-static and insulating qualities.

Stockholders at the meeting question the AMETEK executives on an agreement in principal announced last week (April 18) under which AMETEK would purchase Union Carbide's "KARBATE" business. Dr. Lux said that AMETEK's purchase of this more than $10 million graphite equipment product line should be completed by mid-year.

AMETEK, a diversified industrial manufacturer listed on the New York Stock Exchange since 1930, reported record profits in 1982 and announced last week (April 19) that it had earned $7.6 million or 69 cents per share in the first quarter of 1983, the most profitable quarter in the company's history.

AMETEK TO PURCHASE "KARBATE" BUSINESS FROM UNION CARBIDE

PAOLI, PA., April 18, 1983—AMETEK, Inc. (NYSE-PSE) announced today that it had reached an understanding in principle to purchase the KARBATE graphite equipment business from Union Carbide Corporation for an undisclosed amount of cash. The two companies expect the transaction to be completed within ninety days.

AMETEK said it had an understanding in principle to purchase the well-established KARBATE trademark, patents, manufacturing processes, applications technology, and the manufacturing equipment involved in the business, now located at Union Carbide's Cleveland, Ohio Carbon Products plant. AMETEK plans to move the business to its Haveg division plant near Wilmington, Delaware over the next 18 months.

The Karbate name is recognized throughout the chemical process industries, representing a line of highly-engineered heat exchangers and pumps fabricated from impervious graphite, which are designed to handle acids, solvents, chlorine, and other corrosive materials. AMETEK's Haveg equipment—tanks, towers, and piping systems of proprietary synthetic materials—is specified in many similar applications.

AMETEK, Inc. reported record profits in 1982 and indicated early this month that its first quarter results were running ahead of last year's figures. A diversified industrial manufacturer which has been listed on the New York Stock Exchange since 1930, AMETEK operates thirty plants in the United States.

(Contact: Darrah E. Ribble, Jr., AMETEK, Inc., Station Square Two, Paoli, PA 19301. Phone: (215) 647-2121.)

ARIZONA SILVER CORPORATION (ARIZONA) O-V
CONTINENTAL SILVER CORP. (CONTINENTAL) O-V

Shareholders' Report

VANCOVER, B.C., Canada, May 11, 1983—The Board of Directors are pleased to announce the recent completion of the first phase of an equity financing by Arizona Silver Corporation (ARIZONA) which raised the Company $2,109,000 (Cdn).

ARIZONA is in a position to raise an additional $6,220,000 (Cdn.) over the next year if all the Warrants involved in the financing are exercised. These funds, together with cash flow generated from production will enable ARIZONA to escalate exploration and development activities on its White Hills Mining Properties located in Mohave County, Arizona, U.S.A.

White Hills Mining Properties

The Arizona State Mines Department now considers the Grand Army of the Republic (G.A.R.) Mine (one of several old mines located on the White Hills) to be a development and not an exploration project. Consequently, to comply with Arizona State Law for development mines, an upgrading of the G.A.R. MINE is being carried out as required.

Eureka Mining Property

By Letter Agreement dated December 6, 1982 ARIZONA and Continental Silver Corp. (CONTINENTAL) whose shares are also listed for trading on the Vancouver Stock Exchange and NASDAQ and who is likewise conducting mining operations in the same general vicinity as ARIZONA, were granted an Option to each respectively acquire a 60% and 40% undivided interest in the EUREKA MINING PROPERT to regulatory approval. The EUREKA MINING PRO comprised of 15 mineral claims situated in Mohav Arizona, in the general vicinity of the White Hill Properties.

A 12° inclined shaft has been completed on the MINING PROPERTY and substantial production is s to commence in the near future with the ore produc delivered to the Asarco Incorporated Smelter in Texas, U.S.A. To date two structures have been ider the EUREKA MINING PROPERTY one of which is being prepared for production and is encounterin averaging approximiately 30 oz. silver per ton a silica with some assays exceeding 100 oz. silver p

Recent Significant Developments

The recent lease from United Nuclear of a silv probe will enable ARIZONA to obtain close to control on its mining properties thereby, amor things, keeping development costs down due to the the geology can be more precisely determined. The run down into the drill hole and computerization exact readout in 60 seconds of any silver values tered and is stored in the computerized probe mec In order to take full advantage of the information g the silver assay probe ARIZONA recently purcha mobile drills.

In conclusion, ARIZONA is now in a strong positio full advantage of earlier development work and to dramatically increased silver/gold production for sons as follows:

a) The new silver assay probe is expected to greatly and expedite the existing exploration and deve programs and enable the existing and virgin or on both the WHITE HILLS and EUREKA MINING P TIES to be probed and, where warranted, to be r
b) It is anticipated in the very near future to gradua from processing of lower grade dump material grade underground ore.
c) Development work on the EUREKA MINING PROP proceeding very satisfactorily and nearing th mencement of production;
d) Management is very optimistic that the outlook f and gold prices will remain favorable.

CAPITALIZATION

Arizona Silver Corporation		Continental Silver C	
Authorized	10,000,000 shares	Authorized	5,000,00
Issued	3,926,934 shares	Issue	2,545,08
Listed.		Listed	
Vancouver Stock Exchange	/ARZ	Vancouver Stock Exchar	
NASDAQ	/ARZ NF	NASDAQ	

(Contact: Charles S. Underhill, Director, Arizon Corporation & Continental Silver Corp., Suite 11 Howe Street, Vancouver, B.C. Canada V6C 2T5 Phon 689-5588 or Michael Connor, Balfour Securities, Suit 630 5th Avenue, New York, N.Y. Phone: (212) 489- David Morris, Cowen & Company, 545 Madison Aven York, N.Y. Phone: (212) 688-7400.)

HOSPITAL CORPORATION OF AMERICA

NASHVILLE, TN., April 15—Hospital Corpor America stockholders today elected 16 Directors a proved four other business matters at their annual m and the company announced continued steady growt first quarter of 1983.

HCA President and Chief Executive Officer, Th Frist, Jr., M.D., reported on the company's 1982 a and announced results for the first quarter for 198 stated, "all areas of HCA's operations were strong the quarter. The company is continuing its planned through construction, acquisition, and management pitals for others in the United States and internatio addition, HCA is intensifying its efforts to deliver patient care more efficiently. The pretax margin m ment of 2.4 percentage points in the first quarter of partial evidence of these efforts," he added.

Revenues for 1983's first quarter t

CORPORATE REPORT Updates

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N New York Stock Exchange **A** American Stock Exchange
O Over-the-Counter **P** Pacific Stock Exchange

269,000, up 15 percent from $874,365,000 in the eriod of 1982. Net income increased 43 percent to 0,000 compared with $48,192,000 last year. Earnr share increased 25 percent to $.81, compared with the first quarter of 1982. The 1982 per share figure sted for the company's 4-for-3 stock split distributed ary 1983.

e year-end, fourteen hospital construction projects een completed, including a new 215-bed hospital in Ala. and the replacement of five older hospitals in ter and Channelview, Texas; Nashville, Tenn.; Walter-.C., and Maysville, Kent. Eleven new management t agreements have been signed in 1983, including)-bed University Hospital in Newark, N.J. Other new ed facilities are located in Alabama, Arkansas, Geor- Kentucky, Massachusetts, Pennsylvania, Texas and rginia (2).

dition, effective Jan. 3, 1983, the company sold 18 ls with 2,446 beds for approximately $200 million. as the principal reason that revenues for the first of 1983 increased at a somewhat slower rate than historical increases.

rman Donald S. MacNaughton, conducted the meetich included the reelection of the following board rs: Robert Anderson, Chairman and Chief Executive of Rockwell International Corporation; Frank Borman, an, President and Chief Executive Officer of Eastern ; Owen B. Butler, Chairman of Procter & Gamble ny; Frank T. Cary, Chairman of the Executive Commit- BM; Barbara M. Clark, Prudential-Bache Securities; . DeButts retired Chairman and Chief Executive of American Telephone and Telegraph Company; Max nond, M.D.; Winfield Dunn, D.D.S., HCA Senior Vice nt; Thomas F. Frist, Jr., M.D., HCA President and xecutive Officer; Thomas N.P. Johns, M.D.; Charles J. hairman and Chief Executive Officer of Third Nationoration and the Third National Bank in Nashville; S. MacNaughton, HCA Chairman of the Board; Carl hardt, Chairman, President and Chief Executive of Wells Fargo & Company and Wells Fargo Bank; S. Royal, M.D.; Irving S. Shapiro, Chairman of the Committee of E.I. DuPont De Nemours & Co.; David amson Jr., HCA Executive Vice President.

Naughton also announced that former directors, s F. Frist, Sr., M.D. and Richard S. Perkins were Directors Emeritus. Dr. Frist, Sr., one of the comfounders and a Board member since 1968, will e to serve as HCA's Chief Medical Director. Mr. , former Chairman of the Executive Committee of k, has served on the HCA Board since 1970.

is a publicly owned international health care comommitted to the delivery of quality patient care at a able cost. HCA and its affiliates now own or manage ers more than 350 hospitals with over 50,000 beds ide.

FINANCIAL HIGHLIGHTS

	Three Months Ended March 31		
	1983	1982	% Increase
evenues	**$1,008,269,000**	$874,365,000	15
re income taxes	**114,810,000**	78,392,000	46
r income taxes	**45,800,000**	30,200,000	52
	69,010,000	48,192,000	438
mber of common and ivalent shares	**87,115,000**	78,916,000(a)	10
per common and quivalent share	**$.81**	$.65(a)	25

d for 4-for-3 stock split distributed in January 1983

tact: Victor L. Campbell, Vice President-Corporate nications, Hospital Corporation of America, P.O. Box ashville, TN 37203. Phone: (615) 327-9551.)

LL RESOURCES INC. **V**

) Stabell Resources of Vancouver B.C. reported today eir offices in Val d'Or Que. where their reactivated roperty is located. Former Gold producer (Green , 1933-37) produced 15,159 ounces of Gold, 4,223 ounces of Silver, plus 397,000 pounds of Copper from 71,500 tons of treated ore.

The company has commenced a detail drilling program on the first of nine presently identified targets, outlined by geological and geophysical methods including V.L.F. on its 1,718 acre property.

Vein #2 located 2,500′ west of shaft #1 is a Quartz surface showing uncovered for a length of 250′ varies in width from 3′ to 11.5′. Diamond drilling has outlined the continuing downward extension with consistency from surface to 100′, 200′, 300′, 400′, and present 500′ level.

The best values encountered were for a 11.4′ section from footage 220 to 231.4 averaging .40 ounces Gold per ton. However, the overall averages remain a commercial .22 ounces Gold per ton which is in keeping with the norms established in this camp since early thirties with mines now working at depths of 5 to 6,000 feet.

The #2 Quartz vein occurs in association with a Grano Diorite which in certain instances had values assayed at .25 and .29 ounces Gold per ton for sections varying for 5.5′ and 3.3′ respectively.

This new geological information previously ignored presents added potential to a very promising property. Surrounded by known producers to the west by Sullivan Mines, produced 1.1 million ounces of Gold and to the east by Sigma (Dome) 3.3 million ounces produced (1937-1983) and by Teck Lamaque. These strategically located 1,718 acres represent a potential unparalleled in the Val d'Or Gold Camp. The company has completed its second successful underwriting and is well financed to carry out its current program.

CAPITALIZATION

Stabell Resources Inc.	
Authorized	10,000,000 shares
Issued	3,400,000
Listed	Vancouver Stock Exchange SLR

(Contact: Louis Roy, Sec. Treas., 1271-7th Street, Val d'Or, Que., J9P 3S1 (819) 825-8628 or Bill Hallessey, 2055-Peel Street, Montreal, Que., H3A 3B8 (514) 845-0834 or Daniel W. Small, Vancouver, (604) 669-8135.)

UNITED ENERGY RESOURCES, INC. **N**

Houston, Tex., April 28, 1983—United Energy Resources, Inc. today reported unaudited consolidated net income of $39.7 million on revenues of $1.3 billion for the first quarter of 1983, compared with net income of $64.2 million on revenues of $1.6 billion for the first quarter of 1982. Earnings per share for the first quarter of 1983 were $1.43, compared with the $2.31 per share for the first quarter of 1982.

J. Hugh Roff, Jr., United Energy's chairman, president and chief executive officer, stated, "As anticipated, during the first quarter of 1983, the economic recession, low alternate fuel prices and the excess supply of natural gas continued to impact all of our operations. Volumes sold by our pipeline systems were slightly below the levels experienced during the fourth quarter of 1982."

United Energy Resources is the parent company of United Gas Pipe Line Company (interstate natural gas transmission), United Texas Transmission Company (intrastate natural gas transmission), Cotton Petroleum Corporation (oil and gas exploration, development and production), United Energy Services Company (contract drilling and well servicing) and PetroUnited, Inc. (bulk liquids terminaling and marketing).

UNITED ENERGY RESOURCES, INC.
(Unaudited)

	Three Months Ended March 31	
	1983	1982
Operating Revenues	**$1,257,919,000**	$1,574,863,000
Net Income	**$39,659,000**	$64,197,000
Earnings Per Share	**$1.43**	$2.31
Weighted Average Shares Outstanding	**27,820,000**	27,820,000

(Contact: Marvin L. Brown, Jr., Manager-Media Relations, United Energy Resources, Inc. P.O. Box 1478, Houston, TX 77001. Phone (713) 229-5373.)

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In the next few months, the Dow may shed 50 to 150 points, but it should be rested and recharged to take on the fall.

SUMMER RECESS

By Ann C. Brown

For the first time since their spectacular rise last August, the majority of stocks look as if down is the direction of least resistance. The yellow flags are up. And caution flickers on our company computer CRT, signaling that the market may very soon run out of breadth.

While numbers, formulas and ratios are one thing, gut feel is frequently a confirming factor, and right now it isn't feeling very good.

Item: The stocks on the recent most-active list include an increasing number of names of lesser-quality companies.

Item: Takeover stories abound—replacing improving earnings as the principal reason for buying stocks.

Item: The once-hesitant public is increasingly entering the market, purchasing stocks from the "we-got-there-first" institutions.

Item: No one has called me with a single sell idea.

Things could get a bit choppy in the weeks ahead, as second-quarter earnings come out and perhaps prove somewhat more disappointing than earlier expected, since the pickup in the economy has been slow and erratic. Then, too, this summer will see those smart enough to buy last year, before the rally, go long-term in the capital gains department and cash in some of their chips.

Another factor looming on the horizon is whether Paul Volcker will be reappointed to head the Fed. If he is, the market may go down, as Volcker is perceived by some as a liability to 1984 Republican political plans, since he is held largely responsible for the uncomfortably high unemployment situation. If he is not reappointed, the market may tank for fear that his successor will go easy on money, sparking inflationary expectations.

So far, the market rise has been fueled by falling interest rates. When those fires started to die down, along came the inflation-dampening drop in oil prices. Unless Congress does something about the deficit, which is unlikely, since many candidates are already off and running (and legislators are loath to chop off the hands that pull voting machine levers), interest rates could move up. Oil prices could continue to drift lower, but any sharp drop would result in greater instability in the Middle East and trouble for the banking system—both of which could derail the stock market from its current fast track.

This does not mean that the bull market of 1982-83 is over. Flat or down, the market will be merely on vacation and should return rested and recharged to take on the autumn, by which time some of the worries and suspicions should have passed. True, the DJI may shed 50 to 150 points in the process, but the absence of bloat should be beneficial over the long term. Besides, come September, the effect of the July 1983 tax cut should begin to be felt at corporate cash registers.

One company that could continue to ring up record sales, regardless of what happens at the Federal Reserve, to OPEC or on Capitol Hill is *American Greetings* (23). For the fiscal year ended February 1983, this manufacturer of cards, stationery and other end-user paper and novelty products reported its eighth consecutive record annual earnings of $1.54 per share, up from $1.20. This year earnings are estimated at $1.75 per share, and $2 looks possible for fiscal 1985.

Also sound is a low-profile company known as the *PHH Group Inc.* (43), mentioned as an attractive situation in my December 1978 column at an adjusted price of 8. According to my records, the company hasn't reported down earnings in ten years, and this year should be no exception. For the year just ended, PHH Group is expected to report earnings per share of $2.20 to $2.22, with $2.60 to $2.65 likely for the year ending April 1984.

Another pair of quiet companies that continue to show earnings increases year after year are *DeLuxe Check Printers* (47) and *John H. Harland Co.* (44). DeLuxe Check Printers has about half the market for printing checks and deposit slips (Harland, about 20%). Since nearly every financial institution seems to be getting into the demand deposit business, the outlook is favorable for these specialty printers. Current earnings estimates for DeLuxe Check Printers are for $3.20 per share for 1983 and possibly as much as $3.75 in 1984.

John H. Harland Co. boasts nearly three decades of record annual earnings and stands to profit from the check proliferation and from increasing its market share at the expense of small, regional printing firms. The company has no debt and could earn $2.40 or so in 1983 and $2.80 to $2.85 in 1984.

Finally, an old friend, *A.C. Nielsen* (35) looks as good today as it did when first recommended in 1979, at 12, and again in 1981, at 18. This diversified marketing research firm has put together a string of up earnings that neither rain nor snow nor neo-Keynesian economics has been able to prevent. The company is controlled by the Nielsen family, who seem happy in their work. With the prospect of 1983 earnings of $2.20 per share and $2.65 next year, they should be. ■

Ann C. Brown is chief executive officer of the equity advisory and portfolio management firm of A.C. Brown & Associates

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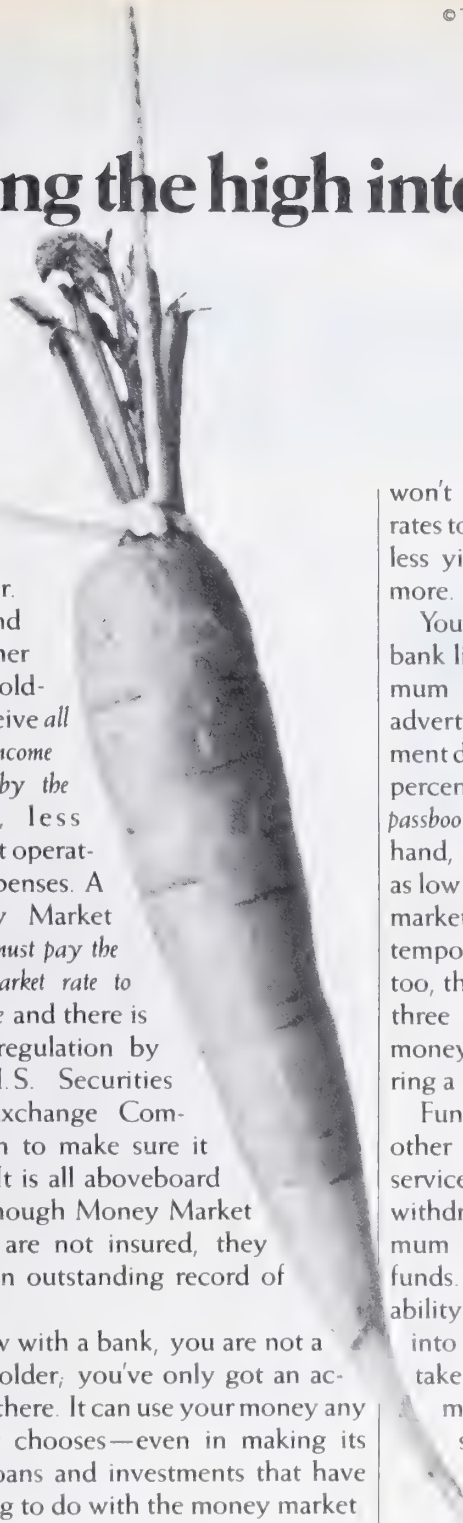
A lot of banks ave been dangling the high interest carrot. Did you bite?



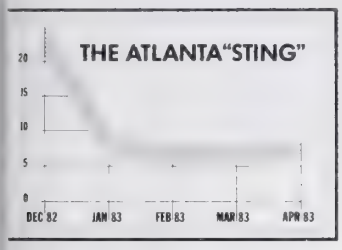
any banks and savings and loan ociations introduced their ney Market Deposit Accounts high promotional rates. Some 20%.

his was, in effect, a "come on" to our account.

ke a look at those bank rates y; the overall bank average is ly different from that of Money ket Funds. And some banks are dy paying less.

you left a Fund for the "bank ion" maybe you should con- coming back. Here are the ons why.

ou could begin by considering of the differences between a Bank



e of the more glaring examples of the "come on" ace in Atlanta. After offering interest rates of %, the banks dropped them by more than half han two months. Then they fell even more

ey Market Account and a Money et Mutual Fund. The Account is Fund.

Money Market Mutual Fund is the ng of your money with that of investors to get high current ns. Your money is invested only in oney market in high quality short securities. The same kind of secu- the most sophisticated investors o safeguard their own money.

ith a Fund, you become a shareholder. You and the other shareholders receive *all of the income earned by the Funds*, less modest operating expenses. A Money Market Fund *must pay the same market rate to everyone* and there is strict regulation by the U.S. Securities and Exchange Commission to make sure it does. It is all aboveboard. And though Money Market Funds are not insured, they have an outstanding record of safety.

Now with a bank, you are not a shareholder; you've only got an account there. It can use your money any way it chooses—even in making its own loans and investments that have nothing to do with the money market.

What's more, the bank can pay *whatever rate it wants to and then keep for itself any profit it doesn't pay you.* (That's why their interest rates have come down so much.) There just is no guarantee that the interest a bank pays you will be a true money market rate. Or that you will receive *all* of the income your money generates. Or, that the bank won't discriminate; it can pay higher rates to its preferred customers. You get less yield and the big depositor gets more. *This is already happening.*

You should also consider some of the bank limitations. They require a minimum balance of $2,500 to get their advertised interest rate. If your investment drops below that, you get only 5¼ percent interest. *You're back to the old passbook rate.* (Most funds, on the other hand, allow a minimum investment of as low as $1,000 or less and pay you the market rate even if your account is temporarily below that limit.) It is a fact, too, that you can never write more than three checks a month on your bank money market account without incurring a penalty.

Funds, meanwhile, offer a number of other advantages—valuable investor services such as an unlimited number of withdrawals by check, although minimum amounts vary among different funds. Also, many of them offer the ability to switch as often as you'd like into other types of mutual funds to take advantage of changing investment opportunities—by making a simple telephone call.

All features considered, most investors would find they're better off now in a Money Market Mutual Fund. You can check this out by comparing your local bank or S&L offer against that of a particular Fund or two. Just call any Money Market Fund and ask for its prospectus. And remember, for us in the Funds, the Money Market is not a sideline. It's where we invest your money full time, every day.

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With the recent rise in the market, investors now are facing some hard choices.

PUTTING OFF THE TAX MAN

By Stanley W. Angrist

Chicago attorneys, C.D. Boutwell and L.K. McNulty, and money managers, H.P. Becker and E.A. O'Sullivan, principals in the firm of H.P.B. Trading Systems, Inc. (800-621-1452) have called to my attention an investment method that could provide downside stock portfolio insurance with a tax advantage. It involves the purchase of puts on stock index futures contracts.

The rally in the stock market has provided lots of investors with substantial portfolio profits. However, in many cases, they have not owned their stocks long enough for the profits from their sale to be subject to long-term tax rates, and they are beginning to feel uneasy about their dramatic rise in market value without a sizable correction. They would like to take profits, but they certainly would not like to pay up to a 50% tax on their gains.

The IRS says that if you buy a put on an individual stock, the day you buy the put determines the length of the underlying stock's holding period. The purchase of a put offers downside protection, but the taxpayer is considered to have sold the stock at the time the put is acquired, which might preclude its treatment as a long-term gain.

If your portfolio consists of a broad cross section of stocks, there is a strategy that will let you take profits while holding the portfolio until completion of the long-term holding period. The advantage of this method is that nothing more is at risk than the premium paid.

Puts on stock index futures contracts are not subject to the same rule as are individual stock options because the underlying stock index futures are not "substantially identical" to the stocks in your portfolio. Thus, the holding-period clock is not stopped with the purchase of an index put. For an investor with substantial portfolio profits, the option premium can be far less expensive than the tax cost of selling today. Keep in mind that the stock index future is a statistical equivalent. The stocks in your portfolio do not mirror the indexes, and there will be room for economic gain or loss on the hedge apart from that reflected in the example below because the stock index future contract is not—and cannot be—precisely the same as your portfolio.

In each of the three cases examined in the table, the outcome is measured against the base case of selling today, realizing a short-term gain and paying full taxes. The portfolio may be hedged by buying $29,000 worth of puts on the S&P's stock index futures contract. This expenditure should be viewed as the premium on an insurance policy against a general market decline.

In this example, the profits on the puts are taxed at the 32% maximum tax rate for a commodity transaction. Andrea S. Kramer, a Chicago attorney who specializes in commodity tax law, says that even though the IRS has not ruled that profits on such transactions should be taxed at the commodity rate, she believes it to be a good position for a number of reasons too lengthy to go into here. However, even if the IRS doesn't so rule, the holder of a put option should be able to convert it to a short position in the futures market and close it out as such. The profit on this trade would be taxed, of course, at no more than 32%. ■

Putting the case for puts

This is an exercise to show the uses of options to protect stock positions. The first column shows, as a basis for comparison, a $480,000 stock portfolio that has increased to $775,000, held for less than a year and then sold for a $295,000 short-term profit taxed at 50%. In the other cases, it is assumed that the portfolio is held for at least a year so that all capital gains are long term. The examples are for a market that rises 20%, one that stays the same and one that declines 20%. In comparison with the base case, an investor is better off buying puts and holding until his profit is a long-term one.

	Base case	Market rises 20%		Market stays same		Market declines 20%	
		w/o puts	w/ puts	w/o puts	w/ puts	w/o puts	w/ puts
Capital gain	$295.0	$450	$450	$295	$295.0	$140	$140.0
Put premium	—	—	(29.0)	—	(29.0)	—	(29.0)
Put gain	—	—	—	—	6.2	—	152.5
Net put g or (l)	—	—	(29.0)	—	(22.8)	—	123.5
Tax on put gain	—	—	—	—	—	—	39.5*
Aftertax put gain	—	—	—	—	—	—	84.0
Net capital gain	295.0	450	421.0	295	272.2	140	140.0
Tax on capital gain	147.5†	90‡	84.2‡	59‡	54.4‡	28‡	28.0‡
Aftertax profit	147.5	360	336.8	236	217.8	112	196.0

Note: All figures are in thousands.
*32% tax rate †50% maximum capital gains tax ‡20% maximum capital gains tax

Stanley W. Angrist is a commodity speculator, consultant and longtime observer of the commodity markets.

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- ENERGY
- MILITARY/AEROSPACE TECHNOLOGY
- ROBOTICS

owhere is the technological revolution ore apparent than in the field of mputers. Around the world—in Japan, nerica and elsewhere—work is ogressing on the coming generation of uper Computers"...with the advent of tificial intelligence in the truest sense of e word, and very-large-scale data ocessing that reduces previous complishments to the insignificant.

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Bull markets and quiet campuses don't go together. If this market stays strong, campuses may become hot spots again.

PUNKS VERSUS PREPPIES

By Srully Blotnick

I have just completed a tour of 20 colleges, surveying more than 2,000 students, and what I discovered is quite different from what I found on a similar tour a year ago. The chief difference is this: Antigovernment and antibusiness sentiment is on the rise, the latter after a steady decline during the last six years. Equally important, the antagonism is just beginning to become organized. Peaceful for a few years now, campuses are likely to start erupting again eventually.

To understand why and what it is likely to lead to, a few comments about the connection between adolescence and politics are in order. The rebelliousness that is common during one's teen years gets a real boost if the U.S. happens to have a widely disliked President at the time. It gives adolescents someone big and important to focus their discontent on. Lyndon Johnson and Richard Nixon were conspicuous examples during the Sixties and did much, merely as targets, to help shape the behavior of adolescents during the period.

Then came Gerald Ford and Jimmy Carter, two Presidents whom the students I surveyed annually kept calling dull. "It's hard," they repeatedly said, "to hate a President who's insipid." The stagflation of the Ford-Carter years also had something to do with the quiet campuses. Are bland leaders and sluggish economic growth linked? Economic historians who look back on this period may find some answers, but this I know: The combination of a disliked leader and the resumption of economic growth is fertile soil for an intensification of adolescent rebelliousness.

We have both conditions for unrest today: a resumption of economic growth and a leader the malcontents can focus their hatred upon. At first, many students saw Reagan as insipid, made of cardboard, celluloid and costumes. Then, when he was shot, people of every age felt sorry for him. But things have changed. Instead of being seen as an actor, he is now viewed as a powerful leader, at the very time that the stock market, acting as a leading economic indicator, hints strongly at slow but sustainable, noninflationary economic growth again. That means that the President can at last begin to serve as a major target of adolescent animosity.

Not every educated adolescent is interested in using Reagan as a straw man to attack. In fact, some rebel against their peers instead of their parents or President. They don't like being identified with "the great [and deliberately] unwashed" on campus. Instead they want to be associated with winners and become one of them. A good name for the current—and growing—split is "Punks versus Preppies," and they choose to be Preppies.

There is nothing new about the division. In prior decades it would have been, say, the Fraternity Crowd versus the Bohemians, Beats, Hoods or Hippies.

Students are reacting to Reagan in strikingly different ways, depending on which camp they would like to join. Those who want to see him as the reincarnation of Johnson and Nixon are having no trouble now convincing themselves that he is every bit as bad as those two, and worse. Instead of Vietnam, they claim he is using Central America as an outlet for his evil instincts. Where most adults see a sincere, direct man, student malcontents see a fanged, malicious reactionary.

The word malicious is crucial to the Punk response. Students used to insist that Gerald Ford's clumsiness made him hard to hate and Jimmy Carter's obtaining foreign policy advice from Amy—his daughter in grade school—made him seem ludicrous. An ingredient was missing that is now perceived as present: For self-righteous indignation and adolescent outrage to pour forth, the President must not only be disliked, but also be seen as someone out to hurt the unprotected, the defenseless. For many students Ronald Reagan fits the bill: In their view he is not only wrong but also malicious.

Look at the Beach Boys incident. To adults it was just mildly amusing. But when Reagan's Interior Secretary Watt said he didn't want the Beach Boys performing on the White House lawn, students were inwardly amused and outwardly shocked. Suddenly, Watt was Spiro Agnew's reincarnation. He wanted to deprive nice kids of innocent music. Another piece had fallen into place to bring the old hates to life.

A Princeton senior, a career-oriented Preppy, told me he didn't think the Punks could pull together. Said he: "There's such a loose conglomeration of factions—environmentalists, anti-nukes, gays, minorities, pro-labor and government social-spending advocates—with almost nothing in common." He's wrong. They do have something in common: a focus of hatred in Ronald Reagan. The economy's growing strength is starting to free many from their exclusive concentration these past few years on good grades and finding scarce jobs. So, enjoy the bull market and strengthening economy but, if they last, don't be surprised to see eventually an unpleasant corollary in campus disruption. ■

Dr. Srully Blotnick is a research psychologist and author of Getting Rich Your Own Way *and* Winning: The Psychology of Successful Investing.

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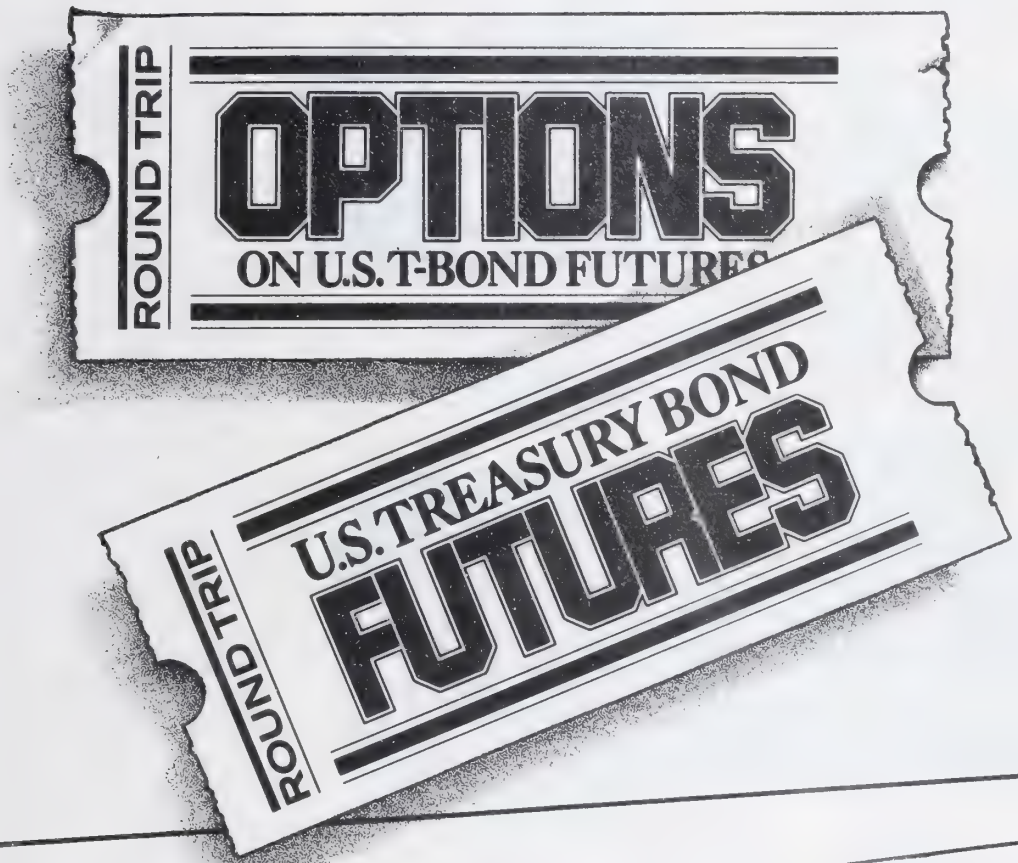

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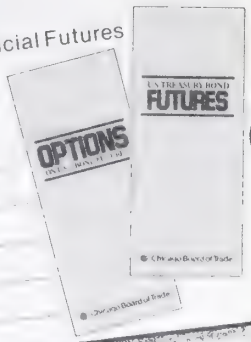

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Shakespeare had it almost right. Do not a borrower be, but being a lender may be the profitable way to go.

LOWER YOUR LEVERAGE

By A. Gary Shilling

As interest rates change course, so should your investment strategy. Borrowing to the hilt made sense in the late 1970s, when prices on real estate and collectibles were soaring and real (inflation-adjusted) interest rates were negative. Today, real interest rates are not only positive but steep, despite three years of recession and only modest recovery. Treasury bonds now yield around 10.5%. With inflation running at about 2%, real interest rates are over 8%, compared with a steady 3% real return through most of the postwar years. These high rates should persist through the 1980s. Why? And what should you do about it?

Many would challenge my assumption that high real interest rates can continue. First, they would point out, the overall supply of funds should increase. Individuals are likely to save heavily in order to help finance their retirements and their children's education and because of the fear of continuing high unemployment. People are also eager to save to replace losses on tangible assets, such as houses. There is also a lot less hedge-buying—less spending now in anticipation of higher prices later. Now, few can fail to notice that the whole world is on sale, if not this month, then next month.

Finally, it now pays well to save. Since last year, even households in the top tax bracket have enjoyed a positive return on Treasury bills, after adjustment for taxes and inflation. In all previous postwar years, that return was always negative. Saving, then, is back in style.

On the other side of the balance sheet, high real interest rates discourage borrowing. Demand for funds is weak. Real interest rates measure the extent to which borrowers *cannot* pass on their financing costs. Inflation measures an investment's appreciation or a business' success in passing through costs. Thus, the difference between the inflation rate and interest rates is the amount that the borrower himself has to eat.

If savers are increasing the supply of funds and demand is weak, then the price of funds—interest rates—should decline. At least this has been our experience since 1945. We are not, however, in a typical postwar period.

Several key factors will keep rates up there. First, the financial community is nervous about the persistent, vast federal deficit and the specter of inflation that deficits raise. These fears are probably exaggerated. With any reasonable economic expansion, federal deficits should decline faster than most people expect. Congress may control expenditures more effectively than pessimists think. The financial markets, nevertheless, fear that rampant inflation will soon return. In light of that risk, as they see it, current real interest rates are normal, or even on the low side.

In any case, it may take longer

A. Gary Shilling, a guest columnist, is president of A. Gary Shilling & Co., Inc., a New York economic consulting firm. He is author of Is Inflation Ending? Are You Ready?

ıan it did in the past for lenders to onclude that inflation is not a ma- ɔr concern anymore. Bondholders ıcurred huge losses in 1980 and 981. A prolonged stretch of high ɜal returns, many of them feel, will ɜ only fair play, considering the eating they took.

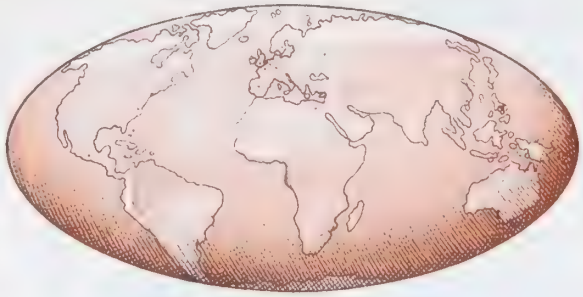
A continuation of high real inter- st rates calls for a 180-degree turn ı your investment strategy. In the ıte 1970s those with big debts held ıe gun. With high inflation and kcessive interest rates, lenders in ɜal terms were paying borrowers to ıke the filthy lucre away. Now the ın is in the hands of those with lean balance sheets and lots of as- ɜts. For them, interest returns far xceed any inflation-induced cost ıcreases. Borrowers, on the con- ary, have much higher financing ɔsts than they can pass on.

What should you do? First, if you ave already borrowed heavily, es- ɜcially to hold tangible assets, liq- idation may be the prudent, albeit ainful, course. Take your losses ɔw rather than slowly bleed to ɜath from interest rates that are igher than the appreciation on ɔur investment. If you paid 15% ıterest to borrow money to invest ı farm land that is declining in alue, you are getting killed.

Second, increase your rate of sav- ıg out of current income. The ɜnefits of forgoing current spend- ıg are likely to remain high.

Third, finance your investments ıt of your own funds rather than ɔrrow at today's high rates. And urth, if that irresistible invest- ient opportunity knocks, beware. you borrow to invest, be sure ɔu get a high return on an invest- ent that is compatible with a ɔninflationary environment. As ɔted in my May 23 column, fi- ıncial assets—stocks and bonds— e likely to enjoy higher returns ıan tangibles. If you must borrow, ıen borrow against these high- elding assets.

"Neither a borrower nor a lender ɜ," Polonius advised his son, "For a an oft loses both itself and friend; nd borrowing dulls the edge of ısbandry." In today's economy, ɔrrowers will indeed find that ıeir highly leveraged tangible as- ts have lost their edge, but lenders ıd financial-assets holders will ap rich rewards. ■



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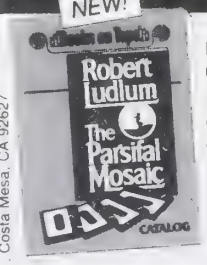

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Index of companies covered in news stories and by the columnists in this issue.

AB Volvo (Sweden) ... 181
AEG Telefunken (W. Germany) ... 161
[illegible] Broadcasting ... 45
American Express ... 16, 62
Amerivest Group ... 181
Amoco Chemical ... 26
Anheuser Busch ... 114
Aring Equipment ... 50
Arrow Electronics ... 82
AT&T ... 6
Avis ... cover
Avnet ... 82
Avon ... 180
Ball ... 182
Banks of Iowa ... 43
Bantam Books ... 180
Black & Decker ... 161
Braintech ... 121
Broadview Financial ... 14
Bucyrus-Erie ... 46
Burroughs ... 156
Business People ... 182
Caterpillar Tractor ... 46
CBS ... 45
Chase Manhattan ... 180
Chemical NY ... 180
Chi Chi's ... 114
Chrysler ... 10
CII (France) ... 157
Citicorp ... 180
Citizens Bancorp ... 43
Citizens North Shore ... 43
Clark ... 50
Coleco ... 45
Commercial Natl Bank ... 43
Communication Inds ... 16
Compaq Computer ... 168
Conroy ... 104
Control Data ... 157
Cordis ... 120
Corvus Systems ... 190
CPI ... 107
Cummins Engine ... 46
Cushing & Cushing ... 204
Cybernex ... 168
Daimler-Benz (W. Germany) ... 10, 181
B. Dalton ... 180
Data General ... 45, 156
Data Point ... 45
Dell ... 45, 180
Deloitte Haskins & Sells ... 16
Digital Equipment ... 156
Dohrmann-King ... 21
Dreyfus Funds ... 100
Explorer Fund ... 198
Feedback Group (U.K.) ... 108
First Bank System ... 43
First Financial Management ... 43
First Interstate Bancorp ... 42
First National ... 43
First Nationwide Savings ... 45
Floating Point ... 45
FMC ... 50
Ford Motor ... 10
Fortune ... 6
E.G. Francis ... 62
GE ... 16, 31, 56, 121, 162
General Mills ... 114
Geo Space ... 165
GM ... 10, 162
Grand Metropolitan Ltd (U.K.) ... 162
Great American Puzzle Factory ... 114
David J. Greene & Co ... 46
Gulf & Western ... 180
Hallmark ... 114
Harlequin Books ... 180
Harris ... 16
Herreth Orr & Jones ... 62
Hershey Foods ... 114
Hertz ... cover
Honeywell ... 157
Houtech Ltd I ... 44
H.P.B. Trading Systems ... 210
E.F. Hutton ... 62, 178
IBM ... 31, ,156,162, 168
IDS Bond Funds ... 203
Intel ... 82
International Harvester ... 46, 181
Kemper Municipal Bond Fund ... 203
Keystone ... 196
Komatsu Ltd (Japan) ... 46
Kroger ... 180
Lerner & Co ... 62
Macmillan ... 46
Magellan Fund ... 198
Makita Electric Works (Japan) ... 161
Manufacturers Hanover ... 180
Martin Marietta ... 41
Masco ... 21
McDonald's ... 174
MCI ... 16
Media General ... 190
Merrill Lynch ... 42, 62, 168
Metromedia ... 16
Milton Bradley ... 114
Mitsubishi Electric (Japan) ... 46, 157
Motorola ... 16, 82
Multi-Vest ... 62
National Steel ... 45
NBI ... 45
Newsweek ... 6
Nihon Kohden (Japan) ... 120
Northern Telecom Ltd (Canada) ... 1[illegible]
John Nuveen & Co ... [illegible]
Oklahoma City Airport Trust ... 20
Oppenheimer Target Fund ... 19
Outlet ... [illegible]
Over-the-Counter Securities Fund ... 19
Paine Webber ... [illegible]
Peat, Marwick, Mitchell ... [illegible]
Pizza Time ... [illegible]
PLM (Sweden) ... 18
Prudential-Bache ... 62, 16
RCA ... 16
Rite Aid ... 18
Rockefeller Center ... [illegible]
Rotan Mosle ... [illegible]
T. Rowe Price Funds ... 19
Safeway Stores ... 1[illegible]
Sanyo (Japan) ... 16
Savers Capital ... [illegible]
Sears, Roebuck ... 42, 1[illegible]
Security Pacific ... [illegible]
Shearson/American Express ... [illegible]
Silhouette Books ... 18
Smith Barney ... [illegible]
Sperry ... 19
Storage Technology ... [illegible]
St Paul Cos ... [illegible]
St Paul Growth Fund ... 19
Standard Microsystems ... 19
State Farm Mutual ... [illegible]
SteinRoe ... 19
Sunrise Savings & Loan ... [illegible]
Systomatics ... [illegible]
Taco Bell ... 11
Taco Viva ... 11
Tenenbaum-Hill Assocs ... 16
Texas Instruments ... 82, 16
Textron ... 11
Tidewater ... [illegible]
Time Inc ... [illegible]
Timex ... 16
Transitron ... 6, 20
Trust Company of the West ... 19
United Feature Syndicate ... 11
US West ... 18
Value Line Funds ... 19
Van Kampen Merritt ... [illegible]
Volkswagen A.G. (W. Germany) ... 10, 20
Waldenbooks ... 18
Warner Communications ... [illegible]
Washington Post ... [illegible]
Washington Public Power Supply System ... [illegible]
Western Savings & Loan ... [illegible]
Westinghouse Electric ... 50, [illegible]
Winn-Dixie ... 18

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Flashbacks

"The more things change. . . ." Items from past issues of FORBES

Edited by Dero A. Saunders

ixty years ago in FORBES

rom the issue of June 9, 1923)

n this 1923 cartoon, building labor is a ew Samson pulling down its own temple

Conditions in the building industry f New York have reached the point vhere banks and money lending insti- utions are threatening to curtail oans to speculative builders, who are lamed for creating the artificial labor hortage. All bricklayers employed by he Mason Builders' Association have one on strike, tying up work on ap- roximately $150 million of construc- ion work. Refusal of the workers' emands for a two-year contract at 12 a day will probably result in a omplete tie-up of the industry."

Here is an attempt to read the politi- al horoscope: If America enjoys pros- erity between now and the holding f the presidential conventions, Presi- ent Harding will have a walkover. But should industry collapse, causing widespread unemployment, and should our vast agricultural population suffer hardship, the indications are that there will be a nationwide clamor for Henry Ford. If the Democrats were to reject Ford and he were to head a third party, the Republicans would feel perfectly safe. But should Ford be accepted by the Democrats, the Republicans and the majority of businessmen throughout the country would become gravely alarmed. Although he will have nothing to do with the labor unions, Ford is widely regarded by workers as the hero of the employing class."

"The selection of Stanley Baldwin as Premier to succeed Bonar Law met with the hearty approval of British business and financial leaders. His skilful handling of the American debt settlement and the soundness of his budget have greatly impressed the financial community with his business ability and foresight."

Fifty years ago

(June 1, 1933)

"What's happened in the seven weeks since beer's rebirth? First, as to beer itself: The infant has shown signs of lusty health. Sales have exceeded brewers' estimates. The extent of the first rush for beer was a surprise, sales have dropped but little from the peak of the first two weeks, and the traditional hot-weather demand has not yet started. Summer sales, in the industry's opinion, will go much beyond the April peak. In April's three legal weeks, the federal government's $5-a-barrel tax was levied on 1.7 million barrels, which means that 410 million pint bottles or 820 million eight-ounce glasses were consumed."

"Cheerful news is again popular. Not so long ago it was common for the writer to receive letters denouncing him for publishing facts and figures about enterprises which were doing relatively well. The expression of hopeful views also brought condemnation. . . .

"All this has changed. From all quarters now voluntarily come telegrams, letters, circulars, reports describing gains in output and sales. Almost every executive is now willing to make optimistic statements for public consumption."

"A year ago Chicago's proposed fair was never mentioned without someone asking, 'Do you think they will really be able to hold it?' Even in the early months of 1933, stories were going the rounds that in spite of its magnificent publicity, the organization behind the Century of Progress Exposition was practically bankrupt, was both unable to pay the salaries of noted designers it had engaged and unable to give them money to spend on their designs. May 27 has now arrived, with the Exposition ready to open, with $25 million invested in its wonders, 5,000 men given much-needed work, and not a cent levied on the community."

Twenty-five years ago

(June 1, 1958)

"When cinema hero William Holden signed with Hollywood's Columbia Pictures Corp. to star in *Bridge on the River Kwai,* the creak of straining cash registers and the groans of outraged moviemen could be heard from Hollywood and Vine to Broad and Wall. Holden had insisted on—and gotten—an unprecedented deal under the terms of which Columbia would have to pay him 10 cents on every dollar *Kwai* grossed at the box office. And to keep the tax collector from getting it all, Holden also insisted that Columbia spread out the payments so that he would get no more than $50,000 in any one year.

"As it turned out, Holden and his lawyers had apparently outfoxed themselves. With *Kwai* making the ticket registers ring merrily, the picture seemed set to gross $25 million, which would mean eventual earnings of $2.5 million for actor Holden. The only catch: With the $50,000-a-year limit, Holden, now 40, might not be around long enough to collect it all."

resident Warren G. Harding, Secretary of State Charles Evans Hughes, Treasury ecretary Andrew W. Mellon and Secretary of Commerce Herbert C. Hoover ***Vashington's potent Big Four in 1923.***

Thoughts on the Business of Life

People who have no weaknesses are terrible; there is no way of taking advantage of them.
ANATOLE FRANCE

Treading on others adds nothing to our stature.
ARNOLD GLASOW

All men judge the acts of others by what they would have done themselves.
DIONYSIUS

Expedients are for the hour; principles for the ages.
HENRY WARD BEECHER

Human behavior flows from three main sources: desire, emotion, and knowledge.
PLATO

A Text . . .

Remember the days of old, consider the years of many generations: ask thy father, and he will shew thee; thy elders, and they will tell thee.
DEUTERONOMY 32:7

Sent in by R.J. Reek, Mt. Prospect, Ill. What's your favorite text? *The Forbes Scrapbook of Thoughts on the Business of Life* is presented to senders of texts used.

One of the most important lessons that experience teaches is that, on the whole, success depends more upon character than upon either intellect or fortune.
WILLIAM LECKY

Beware so long as you live, of judging men by their outward appearance.
JEAN DE LA FONTAINE

Although hard to define, loyalty is easy to detect. Let a worker be ever so brilliant, ever so brainy, ever so ambitious, if his employers know he is not loyal through and through, they will not for a moment consider promoting him to a position of great trust and responsibility, for disloyalty breeds distrust.
B.C. FORBES

When put to the test, an ounce of loyalty is worth a pound of cleverness.
ELBERT HUBBARD

To be trusted is a greater compliment than being loved.
GEORGE MACDONALD

He that has truth in his heart need never fear the want of persuasion on his tongue.
JOHN RUSKIN

I cannot find language of sufficient energy to convey my sense of the sacredness of private integrity.
RALPH WALDO EMERSON

The most tragic thing in the world is a man of genius who is not a man of honor.
GEORGE BERNARD SHAW

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Human beings do not do all the evil of which they are capable.
HENRI DE MONTHERLANT

Show me the man you honor, and I will know what kind of man you are, for it shows me what your ideal of manhood is and what kind of man you long to be.
THOMAS CARLYLE

Learn to distinguish the difference between errors of knowledge and breaches of morality.
AYN RAND

Be what nature intended you for, and you will succeed; be anything else and you will be ten thousand times worse than nothing.
SYDNEY SMITH

The man who acts never has any conscience; no one has any conscience but the man who thinks.
GOETHE

Let us not paralyze our capacity for good by brooding of man's capacity for evil.
DAVID SARNOFF

It is a curious fact that people are never so trivial as when they take themselves seriously.
OSCAR WILDE

Lack of loyalty is one of the major causes of failure in every walk of life.
NAPOLEON HILL

This above all: to thine own self be true, and it must follow, as the night the day, thou canst not then be false to any man.
SHAKESPEARE

FORBES
June 20, 1983

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"We're ready to go up against any other carrier–including trucks with Conrail's modern freight transportation system."

— L. Stanley Crane, Chairman, Conrail

"Here's why I can make this statement: Conrail is offering shippers some of the most competitive rates and innovative services on rail or highway today. The reason: Railroads are far less regulated—and high time. We can now set our prices and tailor our service to meet your individual needs.

"Please take a few minutes to read on, then let's talk business."

"Now we're giving trucks a real run for their money, even on short-haul routes."

"Conrail is beating the trucker at his own game. Our better cost control means we can give you prices that are much less than truck rates on grain and chemicals and many other commodities for distances of 300 miles or less—even under 100 miles in some cases.

"Our prices allow a grain broker to buy surplus grain in one market, move it by Conrail at these low rates to another market hundreds of miles away, and still make a good profit.

"These rates and efficiencies apply to many commodities besides chemicals and grain, such as minerals, petroleum and vegetable oils, as well as to processors and sugar refiners. And they apply whether you have one car or one hundred."

"Conrail's prices are not only competitive, they're more flexible."

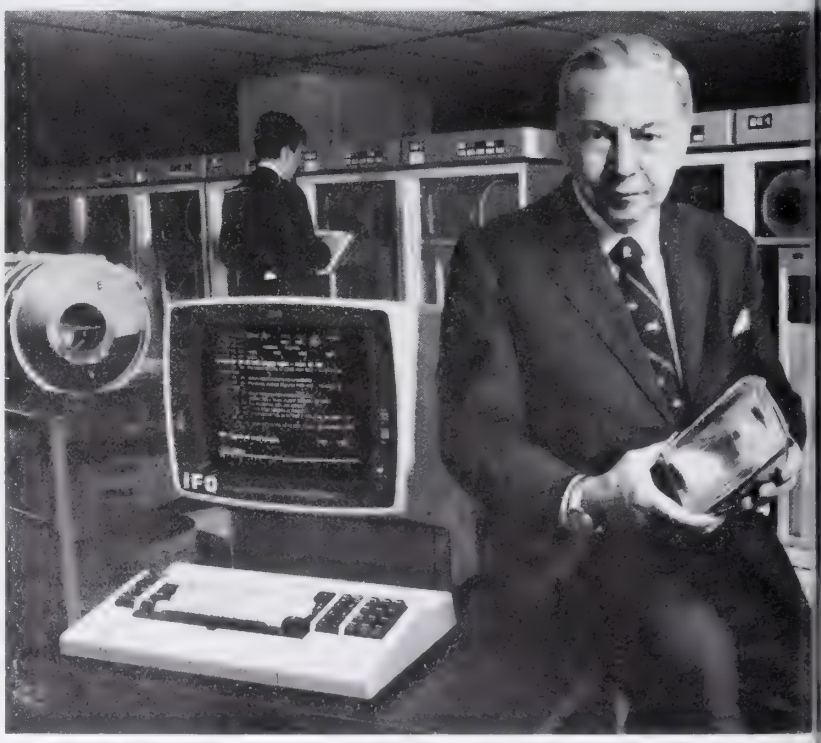
"If you ship iron or steel coils, you save when you move them on Conrail. If you ship alcoholic beverages between the Northeast and the Midwest, you save up to 30 percent compared with trucks.

"And through our piggyback wholesalers—our Volume Shippers—we also offer you very attractive rates to get your products off the highway and moving by piggyback.

"Coal customers using our new coal export facility at Pier 124 in Philadelphia appreciate our flexibility. They can make a reservation months in advance to export coal and be guaranteed a rate and a berth on the day and the time specified.

"What's more, until October 1, 1983, we'll guarantee to load vessels at an average rate of 15,000 tons per 24-hour period—or pay, up to certain limits, a vessel detention fee of $335 per hour.

"Coal-burning utilities requiring long-range service and price commitments can also enjoy a new freedom from uncertainty, again thanks to Conrail's willingness to make rate and service commitments



***Conrail has** one of the most sophisticated computer data centers in the country. Whatever you ship, from headlamps to hardware, our computer services, competitive prices and innovative freight services give you the best price and service combination in the marketplace.*

not only for today, but next year as well.

"In addition, we're willing to give utilities greater flexibility through a flat monthly fee, plus a fixed transportation charge per ton of coal moved, regardless of where they buy their coal on Conrail."

"We control every car with one of the most sophisticated computer data centers in the U.S."

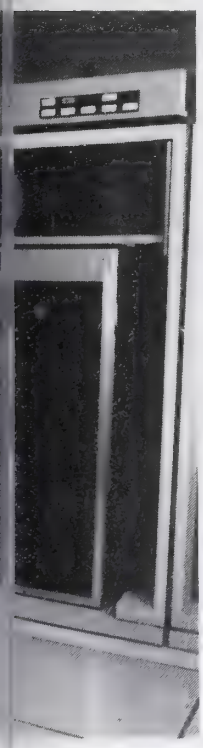
"You could have the most competitive rate and it wouldn't mean a darned thing nowadays if you didn't have the most timely data processing information available to tell you where your car is at any time, and any place on our system. You get them both with Conrail.

"You also get a completely computerized system designed to control car supply based on your forecasts of your needs. As a result, when you call your local car reservation clerk, you're sure to get your car when you want it, where you want it.

"Furthermore, our marketing experts can use our extensive information system to quickly analyze various rate, equipment and service combinations and give you the information you need to respond to today's rapidly changing marketplace."

"Our labor unions are helping us to be more competitive."

"We've entered into a new era of cooperation with our labor unions. They have given us the kind of flexibility that leads to great service, such as Conrail's new Mini-train for General Motors.



"GM required overnight service from Kalamazoo, Mich., where auto parts are consolidated, to Fisher Body and Oldsmobile in Lansing, 118 miles away. To eliminate stocking inventory at the plant, GM required that the parts be delivered "just in time" for the first morning shift—not early, not late.

"Auto parts that once moved by truck are now handled by Conrail *overnight.*

"One very big reason behind our ability to adapt to the needs of GM, in addition to our price and service package, is an agreement by Conrail's labor unions to improve productivity on the Mini-train by eliminating a crew change stop. Productivity improvements such as this are the key to making us more competitive in today's deregulated marketplace."

Kalamazoo, 6 p.m.: *Conrail Mini-train leaves for Lansing with auto parts needed by GM for next day's auto production.*

Lansing, 6 a.m.: *Monday through Friday, parts shipped overnight by Conrail Mini-train already placed on GM's dock before start of first shift.*

"For the second year in a row, Conrail has been profitable."

"Conrail showed a $39 million operating profit in 1982. This financial performance, I'm pleased to say, is even better than our 1981 record, which was one of the most dramatic improvements in American corporate history!

> *"REASON: Conrail can now make price and cost decisions like any other business—and do it in a rapidly changing economy.*

"We look forward to continuing this progress in 1983. We have a plant that is in superb physical condition. Our tie and rail renewals are up to snuff. The supply of cars and locomotives is the best ever. And to ensure continued good service at low cost in the future, we just ordered 100 very efficient new locomotives.

"At Conrail, we have a modern freight transportation system that is second to none."

"If you have a problem, please write to me."

"Last year, we promised you competitive prices, innovative service and on-time delivery. What you just read demonstrates how seriously we took our commitment. And I promise you more of the same this year. But if we ever fail to live up to this promise, I want to know about it *personally.*

"Write to me at 6 Penn Center Plaza, Room 1040C, Philadelphia, PA 19104.

"I'm fighting to get your business—and I'll fight to *keep* it."

L. Stanley Crane

Send coupon for more information, including a free "Shipper's Information Kit" (revised for 1983) with tips on how to get the most out of Conrail's services.

FB620

Mr. L. Stanley Crane
Chairman and CEO
Conrail, Room 1040C
6 Penn Center Plaza
Philadelphia, PA 19104

Please send the "Shipper's Information Kit" and other materials that will help my business.

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Firm_____

Address_____

City_____

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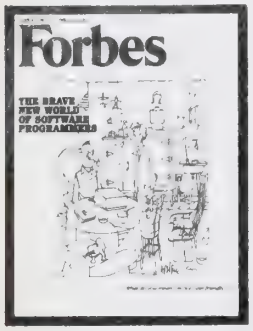
CONRAIL

"We've got to be competitive."

June 20, 1983
Volume 131,
Number 13



93 Cover Story: A golden, if nonguaranteed, opportunity for the software entrepreneurs of the world.

32 The Fed's Solomon: A consensus for lower interest rates

64 The Up & Comers: "Photography is a way of controlling your environment . . . capturing part of it and putting it into your drawer."

30 Military Spending:
Damn The Congress, Full Speed Ahead
The Navy discovers the wonderful world of off-balance-sheet financing.

31 The Market:
The Dow And Inflation
Ever hear of the rule of 20?

32 The Economy:
Solomon's Choice
A rare interview with the Fed's second most powerful man.

33 Investment Scams:
Happy Hunting In Salt Lake City
When neighbor trusts neighbor, unfortunately, it can mean heaven for con artists.

35 Companies:
Arco
A partner with deep pockets.

36 Companies:
Exxon
But Arco is being cautious—and one reason may be Exxon's troubles.

40 Companies:
Purolator
The biggest of the courier companies is trying to shake up the most successful.

42 Streetwalker:
Measuring Measurex
Why have some savvy outfits quietly accumulated cooled-off Measurex?

46 Companies:
Continental Telecom
Ever since Orwell, 1984 has had an ominous ring. Not for Charlie Wohlstetter.

48 Television:
Don't Write The Obituaries Yet
What does it really mean when GE and Dun & Bradstreet shed their TV stations?

50 Companies:
Boeing
Its orders are at an alltime low. So why is its stock near a historic high?

58 Companies:
Carolina Freight
A trucking company avoids the bumps.

60 The Up & Comers:
Hipotronics
Stanley Peschel's is the classic entrepreneur's success story. So what happens now that he's no longer his own boss?

64 The Up & Comers:
Daylab
Harold Dreyfus came up with what the market needed, but the way he did it is even more interesting.

74 Companies:
Doyle Dane Bernbach
The late William Bernbach's successors will have a tough row to hoe.

75 As I See It:
Christopher Freeman vs. Barry Bluestone
Should an economic shift run its course freely? Two opposing views.

88 Energy:
Much Smoke, Little Fire
So far, that's all there is to the ballyhoo about U.S. coal as a major export.

93 Cover Story:
Software To Go
With nearly 10 million personal computers expected to be in use by the end of this year, software has bloomed into a high-tech cottage industry.

106 Profiles:
Gerard Roche
Is this the country's top headhunter?

110 Special Report:
The Capitalist Tool Team In Pakistan
Further adventures of the world's only goodwill international motorcycle gang.

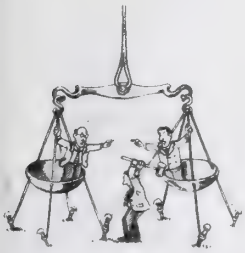
130 Numbers Game:
Outflanking ERISA
A clever ploy, but a big drawback.

131 Taxing Matters:
Refund Time?
As if the Social Security Administration didn't have enough to worry about.

132 Technology:
Go East, Young Man
Is Silicon Valley really the nation's most fertile ground for high-technology development? Not exactly.

74 *Doyle Dane Bernbach: The biggest challenge will be to keep the talent happy*

110 *Forbes in Pakistan: The world's tallest balloon looked somewhat like the Leaning Tower of Pisa—but it flew*



141 *On The Docket Healthy compromise, or cutting the baby in half?*

162 *The Money Men "Who is paying $67? Probably the same people who wouldn't buy at $24."*

140 Companies:
Stone Container Corp.
In 1979 Roger Stone resisted a takeover offer at twice market price. Roger Stone was right.

141 On The Docket:
Arbitration?
It would seem to be natural in these days of crowded courtrooms and expensive lawyers. Not so, as it turns out.

Faces Behind The Figures

143 Nigel Chattey,
Transportation consultant
143 Lee Idleman,
Dean Witter Reynolds Inc.
144 Mort Fleischer,
Franchise Finance Corp. of America
144 Jan Carlzon,
Scandinavian Airlines Group
145 Arnold Hiatt,
Stride Rite Corp.
145 Martin Pompadur,
Television Station Partners
146 Richard Robinson,
Scholastic Inc.
147 Max Siegel,
American Psychological Association
147 Ryoichi Sasakawa,
Japan Shipbuilding Industry Foundation

148 Personal Affairs:
Paris When It Sizzles
His fractious countrymen may not appreciate Mitterrand's economic policies, but American visitors should.

158 Statistical Spotlight:
What Goes On Here?
Usually when a company issues new stock, the price falls. In this emotion-filled bull market, the opposite often happens.

159 The Funds:
The Big Boys Are Back
Suddenly, mutual funds are sexy again.

160 Companies:
Rorer Group
Can ordinary investors throw out managements? Here are some who are trying.

162 The Money Men:
Mark Boyar
His strategy: Look at what the assets would be worth to an acquirer.

Money And Investments

25
What's Ahead For Business
26
The Forbes Index
155
The Forbes/Wilshire 5000 Review

Columnists

167
Ben Weberman
168
Ann C. Brown
169
Srully Blotnick
170
Richard Hoey
172
Thomas P. Murphy
174
Ashby Bladen
175
Stanley W. Angrist
176
David Dreman
177
A. Gary Shilling

Departments

6
Side Lines
8
Trends
12
Follow-Through
14
Readers Say
17
Fact and Comment
20
Other Comments
23
Fact and Comment II
178
Editorial Index
179
Flashbacks
180
Thoughts

Photos:
6 top and bottom, 32, 40, 95, 144 top, 146 left, Bill Kelly; 6 middle, Eric Poggenpohl; 36, Ben Weaver/Camera 5; 42, Dennis Brack/Black Star; 46, Theo Westenberger/Liaison; 50, Mark Meyer, 58, Terry Parke/Liaison; 60, Joe McNally/Camera 5; 64, Vince Streano, 66, John Chang McCurdy; 70, 74, 164, Michael Abramson; 78, Sally Fear; 82, 145 right, Steve Liss/Liaison; 88, Bob Nickelsberg/Liaison; 93, 143, 147 right, Peter Tenzer; 94, 144 bottom, Harry Redl/Black Star; 98 top, Thomas Lea; 98 bottom, 145 left, Jim McHugh, 99, Chris Johns/Black Star; 100 top, John McDermott; 100 bottom, Chuck Rogers/Black Star; 102, 146 right, Jim Pozarik; 107, Joyce Ravid; 110 left, 118 center, Clifford D. May; 110-111, 112 right, 124 center, 126 top, Jerry Young/Telegraph Sunday Magazine; 112 left, 116 left, 118 top, 122, Tim Forbes; 113, 114 left, 118 bottom, 124 top, 126 bottom, Syed Husain Mahmud; 114 right, 116 right, Denny Fleck, 124 bottom, Kip Cleland; 140, Wm. Franklin McMahon, 147 top, Ray Fisher; 148, Jean Guichard/Sygma; 150 left, William Karel/Sygma; 150 right, Thierry Campion/Gamma Liaison; 152-153, Georges Tourdjman; 160, Sal DeMarco/Black Star
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Side Lines

A nice pat on the back

James Cook

The Champion International Corp. has done a fine service to the craft of business journalism by endowing annual rewards for the best economic writing and reporting. The award program is supervised by Dartmouth's Amos Tuck School of Business Administration, and winners are selected by a distinguished panel of independent judges. The winner this year in the magazine category went to FORBES for James Cook's provocative cover story, "The molting of America"—about our shrinking industrial base. In making the award the judges said: "The impact of this article when it appeared in November 1982 was such that many of its themes were incorporated in President Reagan's State of the Union address." We couldn't be prouder.

Dubuque it ain't

Jerry Flint

Jerry Flint, that veteran journalist with the powerful human touch who has headed our Washington bureau the past four years, is taking up a new post. He heads for London this month to head up our coverage of Europe and the U.K. as well as the Middle East and Africa. Readers will remember Flint's moving, realistic account of how the hard-hit city of Dubuque, Iowa weathered the recession *(Mar. 28 cover story)*. Now he will use the talents finely developed in over a quarter of a century in the news business to bring to life yet another part of the economic world. Replacing Flint in Washington is British-born Howard Banks, 45, who joined FORBES in 1982. So, it's a Britisher to Washington and a Detroiter to London. That promises our readers some interesting perspectives.

Schumpeter revisited

Arthur Lewis

Of the dozens of letters we received praising our May 23 cover story *(a sampling is on page 14)*, none gave us more pleasure than one from Nobel laureate Arthur Lewis. The Princeton professor reminded us that—whatever their considerable differences—John Maynard Keynes and Joseph Schumpeter had one thing in common: Both were stagnationists, believing that the capitalist system was running out of steam. Schumpeter, though a passionate believer in free enterprise, thought capitalism would choke on its very success; this is the gloomy side of his remarkably prescient prophecy. But as to that gloomy side, Professor Lewis writes: "Modern economists don't believe in secular stagnation." What this means, of course, is that capitalism is not necessarily digging its own grave. Take away the stagnation aspect of Schumpeter's system and you have a hopeful message for our times: Capitalism and its twin brother, political freedom, are far from doomed.

James W. Michaels
Editor

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Trends

Edited by John A. Conway

Tracking technology

To anyone who looked, patent literature 15 years ago would have accurately foretold the rising foreign competition in engine technology and, 10 years ago, that most companies with patents in fuel control were also foreign. So Richard S. Campbell and Lawrence Levine, a research team at Battelle Pacific Northwest Laboratories in Richmond, Wash., decided to devise a method to try to turn up clues for the next 15 years from the files of the U.S. Patent Office. By studying large sets of related patents (they look at 10 indicators from more than 40 variables for each patent), they say they can detect broad trends. How hot is a given technology? They count the number of patents issued in a given period, how many companies are getting them, the number of dropouts and number of inventors no longer active. If activity is increasing, there might be promise to justify costly research, they say, but a dropoff could mean the technology is obsolete or one firm has a preemptive position. The team claims it can also measure how fast a technology is changing as well as corporate dominance of specific fields. The results, they say, can help companies survive in an increasingly competitive environment.

Ah, those back taxes

A one-time amnesty for individuals who have failed to file tax returns is being pushed by the Chicago Bar Association. By allowing nonfilers to pay up the estimated $5 billion in taxes, interest and penalties they owe and escape criminal prosecution, say the plan's proponents, the government will collect more money than by trying to put all the offenders in jail. (Under federal law, failure to file a tax return is a misdemeanor that can get you up to a year in prison and a fine of up to $25,000.) M. Bernard Aidinoff, chairman of the American Bar Association's tax section, says lawyers and accountants believe that the IRS has an unofficial amnesty policy anyway. But so far, IRS Commissioner Roscoe Egger is opposed. Egger admits amnesty might bring nonfilers back into the system, but he fears some of the former recalcitrants might default on the payments, while still protected by immunity from prosecution. Also, says Egger, honest taxpayers might resent such treatment of nonfilers. But the plan's backers are not giving up: With Congress scratching for ways to raise funds without raising the tax bite, the idea may be one whose time has come.

Pack those bags

One part of the nation's economy should recover vigorously this summer: the tourist business. That's the word from the U.S. Travel Data Center, a national, nonprofit information center in Washington, D.C. Based on a survey of 6,000 people nationwide, the center projects a 12% increase in summer vacation travel this year, compared with a 9% decrease in 1982, and says it will be the best year since 1978. Biggest pickup, says center director Douglas Frechtling, should come in the Northeast and West. Average trips also will be longer and farther this year than in 1982—about 880 miles compared with 810 miles last year. And not only does domestic travel look to be up, but foreign travel by Americans as well: The Center predicts 7% more Americans will travel outside the U.S. this year than a year ago.

Inflation blues

A family of four must earn over $24,000 this year to equal the purchasing power of a $10,000 income in 1970, according to a new report by the New York-based Conference Board. The family that made $15,000 in 1970 now needs just over $37,000 to have the same standard of living, says the board; and families with $25,000 incomes back then must now make almost $62,400. But the news isn't all bad: The average family income has kept pace with living expenses, going from about $10,000 in 1970 to between $25,000 and $26,000 this year, says the board.

"At will" no more?

It used to be that companies could fire noncontract employees for as little as wearing the wrong tie. But labor lawyer Herbert Burstein of New York City's Zelby & Burstein says that may be changing. Last year, he says, hundreds of middle managers around the U.S. who had been fired "at will" sued their employers, and some of them won. Hawaii's supreme court, for example, ruled in favor of a former Flagship International Hotel secretary fired, the company said, for inability to do a satisfactory job. She charged she was dismissed to prevent her from testifying in any antitrust case. In New York recently, a McGraw-Hill employee sued, and won, after he was dismissed for "lack of application." There are now courts in 20 states, says Burstein, that hold "public policy exceptions to the common-law rule that any employee may be dismissed at will at any time." Courts in 13 states view employees' handbooks and manuals like contracts that bind the employers, he says. There is also legislation pending in many states that may require employers who fire employees at will to show just cause, says Burstein, and other states are considering arbitration for such cases.

Selling software

Computer software is one of the hottest products of the electronic age *(see p. 93)*, but until now it has been marketed mostly through computer and electronic stores. Mass merchandising, however, may be a more effective sales tool. Bruce & James, Program Publishers, Inc., for example, has signed on Simon & Schuster to distribute its Wordvision line of word-processing programs (for IBM personal computers) through bookstores and mass merchandise outlets as well as the more traditional computer stores. Simon & Schuster hopes to draft the likes of Sears, K mart and Penney. "A

Software display in a retail store
Now, mass marketing.

founding concept on which we've based the Vision line is that bookstores provide a natural but largely untapped retail base for the sale of personal computer programs," says Bruce & James President Jim Edlin. Softsel Computer Products of Inglewood,

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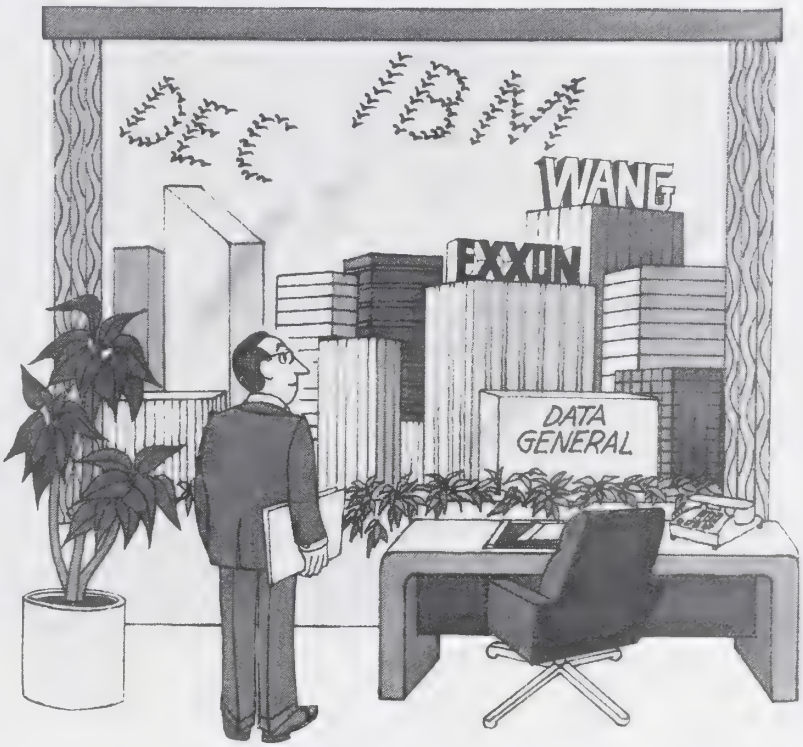

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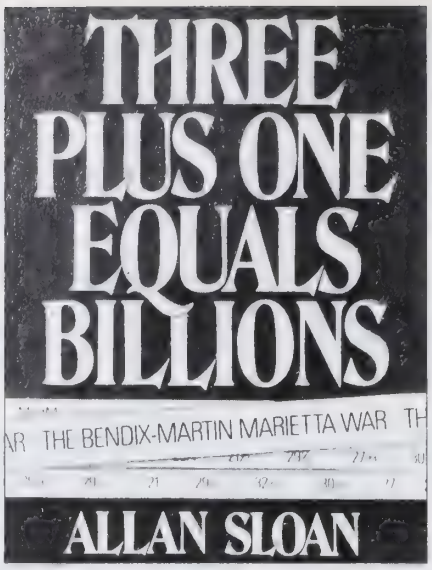
Calif. is also taking the mass merchandise route to distribute personal computer software. The firm, which peddles 230 brands of computer products through retail outlets, struck a deal with Pickwick Rack Services in January to sell its home computer games and programs from racks in mass outlets, and some are already in place at 41 Broadway department stores in Los Angeles and at K mart stores.

On the rocks

Even the booze market has not been untouched by the recession, according to a new report by *Impact*, a New York industry newsletter. Last year was the worst on record in recent years for the U.S. distilled spirits market, the publication says. Shipments fell 4.5% to about 434 million gallons (down 21 million gallons from 1981), putting the industry at pre-1975 levels. Certain subtypes of hard liquor beverages—cordials and liqueurs and rum—were up from 1981. But every major category of distilled spirits had a down year. Whiskey shipments were down 6.3%, and even the so-called "white goods"—gin, rum, vodka and tequila—dropped 3.1%. Brandy shipments fell by 7.3% and cocktails and mixed drinks were off 8.7%. The drop was partially, but not entirely, due to the economy, says an *Impact* spokesman. Hard liquor, after all, costs more than beer and wine. But since even the less expensive beer was flat last year and wine was up only 1.8%, one factor, he says, could be a growing concern about health.

Aftershocks

The takeover war that Bendix waged—and lost—with Martin Marietta last year made plenty of waves on Wall Street. Now the repercussions continue, this time on Publisher's Row. The story of the battle and its chief protagonists—among them former Bendix CEO William Agee and his wife, Mary Cunningham—is told in a new book, *Three Plus One Equals Billions*, by former FORBES Associate Editor Allan Sloan. Arbor House, a Hearst company, rushed the book into print last month, not only for the usual competitive reasons but also because of what Vice President and Associate Publisher Eden Collinsworth calls a "precarious legal situation." Says Collinsworth: "We had received a torrential flood of letters from Agee



Sloan's book
The war that Bill lost.

and Cunningham's lawyer threatening us with a libel suit and advising us that they would exercise their various rights" if the book were published. The publisher and Sloan had two lawyers review the book, and it then went directly from corrected pages into bound books. Arbor House wanted to take no chances, says Collinsworth, either of having unbound galleys fall into unfriendly hands, or of the book's publication being enjoined.

They want to work

Despite the strains of career and kids, most working mothers would rather have a job than take it easy, according to a survey by *Working Mother* of over 2,000 women, most of whom were aged 25 to 34. The poll showed that some 74% of the women would continue to work even if they did not need the money. More than 85% of them make less than $25,000 a year as nurses, teachers, secretaries, technicians, administrators, accountants and computer personnel. Yet some 86% described their work as interesting or challenging, and less than 10% said they would give up their jobs if their husbands asked them to.

The end of the line

Within a decade virtually all 12,000 cabooses now in use on American railroads will have disappeared from the scene. It may be the end of a romantic era, but the railroads estimate it will save them $400 million a year. "The caboose is totally superfluous," says Chris Knapton, a spokesman for the Association of American Railroads. The reason: Repairs no longer are done en route and crewmen don't need to sleep in the caboose. Still, some railroad workers are huffing and puffing about the phaseout (even though the United Transportation Union agreed to it). Their reaction, says Knapton, is that if cabooses go, workers will be next. But "you can't run a railroad on nostalgia," as Lloyd Lewis, a Chessie Systems spokesman, puts it. But the cabooses aren't likely to wind up in junkyards. At least 1,000 railroad buffs are on a waiting list to buy them as soon as they go into retirement.

Corporate angels

Through a two-year-old organization called the Corporate Angel Network, a growing number of companies now donate seats on their private jets to send cancer victims and their families for treatment around the U.S. Priscilla Blum and Jay Weinberg, both former cancer patients, founded CAN in 1981. Now based in hangar F at Westchester County airport in White Plains, N.Y., the Corporate Angels have attracted the participation of 160 business firms in 32 states, including Norton Simon, RCA, Xerox, Bristol-Myers, Weyerhaeuser and PepsiCo. They are helping fill a big need. Costs for cancer treatment are astronomical, but most people have insurance, points out Blum. Transportation, however, usually is not covered. "That's the reason this is so wonderful," she says.

Rich was better

Assuming oil prices hold, here is how OPEC members will fare in 1983. Overall, the sheikhs and their partners will run a current account deficit of about $40 billion, compared with an $8.5 billion red figure last year and a $104 billion surplus in 1980, according to Chemical Bank's economic researchers. Saudi Arabia will run the biggest deficit ($25 billion), with Iraq second ($10.7 billion), followed by Indonesia ($7.5 billion) and Nigeria ($6.6 billion). The Ayatollah's Iran will show an improvement, from a $600 million deficit last year to a $1.3 billion surplus in 1983. Kuwait is also doing nicely; Chemical projects a $10.5 billion current account surplus there. Rising natural gas sales should help Algeria. The end result adds up to cutbacks in exports. OPEC members can fall back on reserves or borrow to keep importing, but sooner or later they will have to tighten their purse strings.

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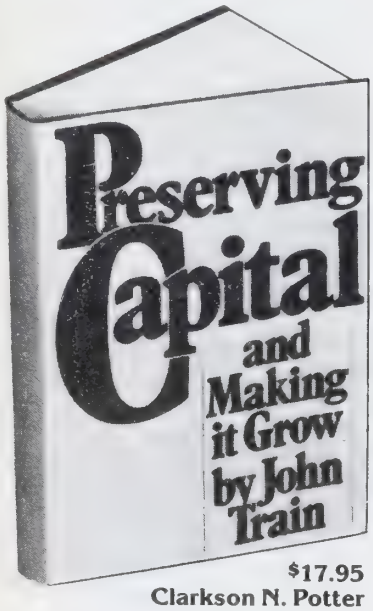

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Follow-Through

On the rebound

Sears, Roebuck and Co. had never really recovered from a series of merchandising missteps of the early Seventies when, in 1980, the $30 billion (sales) giant reported a $7 million retailing loss in the first quarter. It had lost much of its market to K mart and others, and retailing was falling far behind Sears' highly profitable insurance operation, Allstate (FORBES, *July 21, 1980*).

But Chairman and CEO Edward Telling had a plan: He wanted to build Sears into a financial services giant before his retirement (he's now 64). Telling reorganized Sears into a holding company and bought the Coldwell Banker real estate group and broker Dean Witter Reynolds. Then he gave merchandising CEO Edward Brennan, who had come through Sears' retailing ranks, the job of curing the ailing merchant business.

Sears' Telling
"A healthy merchant."

Not only is Telling's financial services strategy paying off, but, he boasts, "the merchant is healthy" as well—after a rigorous reconstruction by Brennan and recent signs of life in consumer spending. First-quarter retailing profits rebounded to $16.2 million, compared with a $23 million loss for that quarter last year. Overall, Sears' first-quarter net jumped more than 130% from the corresponding period of last year, to $165 million from $71 million.

Of course, the drop in interest rates has helped. Sears now has a healthy profit on its 25 million credit accounts—and more than half its $20 billion in annual retail sales are made on credit. Sears also borrows to finance receivables, so the drop in short-term rates has reduced internal costs as well. Selling costs are down, too. First-quarter retail earnings gains came on only a 3% increase in sales, to $4.4 billion. Pretax retail margins last year were up to 4.4%, from 2.1% in 1980. Telling's companywide early retirement program has cut Sears' top-heavy management, too.

If Telling's dream is the Sears of the future, Brennan's is the Sears store of the future, a classier-looking store à la Lord & Taylor or Bloomingdale's. He opened the prototype in April in a suburban Chicago shopping mall. Ten more, all with financial centers staffed by Coldwell Banker realty agents, Dean Witter brokers and Allstate insurance agents, will open in 1983. As for Sears' traditional lines, Brennan spent more than a year weeding out those with the least potential. "We said we won't be in it unless Sears really stands for something in that industry," he says. The newly built or remodeled stores will showcase the surviving traditional Sears brands (like appliances), as well as celebrity-licensed lines (like Diane Von Furstenberg wallpaper and clothing), which are everywhere in evidence at the new Vernon Hills store.

Meanwhile, the diversification continues. Providing that deregulation of banking continues apace, Telling intends over the next five years to "build a nationwide deposit base" for Sears by acquiring more thrift institutions (Sears already owns a California S&L, acquired more than 25 years ago). He has his eye on Illinois' second-largest thrift, the troubled First Federal Savings & Loan Association of Chicago. On the international front, Sears World Trade, Inc., formed last year for foreign trading, recently paired with First Chicago Corp. in a $35 million joint trading venture. Sears will also soon begin selling its credit billing and data processing skills, and eventually may clear checks for banks.

Still, "merchandising has been, is and will be for the foreseeable future our keystone," Telling insists. Although retailing last year contributed a wan $432 million, or less than half, to pretax corporate profits, while Allstate poured in $505 million, Telling expects the trend to reverse this year as the consumer economy strengthens—and some observers agree. Analyst Stanley Iverson of Chicago's Duff & Phelps says retailing could contribute $1.64 of the $3 a share he expects Sears to earn this year.

The Christmas spirit

Joseph M. Katz, founder and chairman of Pittsburgh's Papercraft Corp., is the king of Christmas wrapping (FORBES, *July 8, 1981*), but it bothered him that most of his business came in the last quarter of the year. So after going pub-

lic in 1958, Katz began acquiring—LePage's Inc. (pressure-sensitive tapes and adhesives); Knomark (Tintex dyes, Esquire shoe polish, Ty-D-bol toilet bowl cleaner, household goods); and Barth and Dreyfuss (decorated towels, aprons and potholders).

By 1980 the gift wrap business had dropped to 20% of Papercraft's $150 million sales, and a full 30% of revenues were coming in the first half. That same year, though, Papercraft acquired American Technical Industries, the largest U.S. maker of artificial Christmas trees. Back went the balance of sales to the third and fourth quarters, but Joe and Marshall Katz, the company's president and chief executive officer, were sure ATI would be a real moneymaker.

And it is. Despite the recession, Papercraft's earnings grew nearly 20% a year in 1981 and 1982, to $16 million last year on $185 million in revenues, and a good part of that comes from ATI, which now has about 40% of the domestic artificial Christmas tree market. The stock has split three times in the last three years (the Katz family still holds 20% of it, worth $41 million at recent prices).

So the fears of cyclicality have moderated. "Christmas comes every year," says Marshall Katz. "It is not a cyclical business, just seasonal. To us, it's the same as companies that make products like suntan lotion."

Earnings have picked up elsewhere, too. "LePage's had wonderful growth in 1982," says the elder Katz. Consumers, he says, have moved to lower-priced items as the recession dragged on, and LePage's and its private label brands are cheaper than 3M's Scotch tape. Gift wrappings, the original business, is also expanding but into non-Christmas areas. Papercraft has landed exclusive licenses for wrappings with the Smurfs, E.T., G.I. Joe and Woody Woodpecker.

To grow at his hoped-for rate of 15% a year, Katz says, he can generate about 10% a year internally and 5% a year from acquisitions. Papercraft has bought no new companies since 1980, but it is looking. It wants consumer products companies with sales of $50 million to $100 million a year in small markets—up to $300 million a year at manufacturer's billings. Papercraft also wants products sold through supermarkets, chain drug or mass market stores, because it has always done best in filling just such consumer product market niches. When Joe Katz retires as chairman this year at age 69, his son says he does not plan to touch the winning formula.

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Readers Say

Schumpeter was right

SIR: You and Peter Drucker deserve a public service prize for the Keynes-Schumpeter cover story *(May 23)*.
—David B. Stern
Portland, Ore.

SIR: The best presentation on economics I ever read.
—C.F. Dangelmajer
New York, N.Y.

SIR: As a present business student in graduate school, I was refreshed to learn of some "untapped talent" in the area of economic theory. I hope that more of Schumpeter's ideas come to light.
—Barri Mallin
Dallas, Tex.

SIR: This article was too short.
—Jack Murphy
Brooklyn, N.Y.

SIR: 'Tis a pity Schumpeter was entirely ignored in my college economics course some 25 years ago.
—M.K. Theodoratus
Ft. Collins, Colo.

SIR: Keynes and Schumpeter both believed that capitalism would exhaust itself in stagnation. Keynes, like all economists before him, thought this would happen for economic reasons (not enough new investment ideas). Schumpeter believed the system was all right but would destroy itself for political and cultural reasons. Their difference from our day is that modern economists don't believe in secular stagnation.
—W.A. Lewis,
Professor of political economy,
Princeton University
Princeton, N.J.

SIR: Milton Friedman likened to Keynes? One might as well equate chalk and cheese on the grounds that both commence with *ch*.
—A.J. Davies
Ridgefield, Conn

Friedman, like Keynes, thinks one can manage society by manipulating aggregates. Schumpeter, wiser, understood that men are not so easily manipulated.—ED.

SIR: In the mid-Sixties, in Harvard's economics department, Schumpeter's theories were mainly taught to practitioners from underdeveloped countries, like me, while Keynesian economics was supposed to be meant for the American and European graduate students.

The distinction emphasizes the point made by Drucker—innovation and entrepreneurship were seen as only necessary to the so-called developing countries.
—Nirmala Cherukupalle
New York, N.Y.

Appreciates confidence

SIR: Re "For A New Fed Chairman President Reagan couldn't do better than Alan Greenspan" *(Fact and Comment, May 23)*. I very much appreciate and thank you for your vote of confidence.
—Alan Greenspan
New York, N.Y.

Controlling our borders

SIR: Your editorial on illegal immigration is timely *(Fact and Comment, May 9)*. We've got as many undocumented aliens as we have unemployed. We've lost control of our borders.
—Bradley F. Norpell
Cleveland, Ohio

SIR: Our leaky border? Remember, Mexicanos are only coming home to land that was taken away from them in a war.
—W.M. Buescher
Pigeon Forge, Tenn.

SIR: You do not understand the whole problem. We in agriculture have a very seasonal need for hand labor. It is no longer necessary for domestic labor to perform these tasks. The typical illegal worker is an adult male who welcomes the seasonal aspect of work that allows him to return to his country and family after working six months out of the year.
—Gary I. Miguel
Pasco, Wash.

Still needs help

SIR: Your article on public television ("Kicking the habit," *May 9*) provides a welcome, if wildly optimistic, rundown of many of the revenue-producing efforts that PBS is undertaking. Massive cuts in federal funds cannot readily be offset by public television's other income sources.

Every outside commission that has studied public television's funding needs has made it clear that public television cannot survive without taxpayer-supported appropriations.
—Laurence K. Grossman
President,
Public Broadcasting Service
Washington, D.C.

SIR: You say that our organization "bellyaches" and "cries poor mouth so much of the time." The overwhelming majority of personnel in the Public Broadcasting System believe the decrease in government funding and increase in private support is a positive step. The federal cutbacks were an effective sales tool in appealing to business executives in the private sector.
—Mary B. Van Dis
Corporate Underwriting Director,
WGVC/TV-35
Grand Rapids, Mich.

Right fund

SIR: The name of the mutual fund *(Feb. 28)* with a 77.2% change in net asset value for the period 6/30/82 to 1/31/83 (assuming reinvestment of all capital gains) is Oppenheimer Target Fund, not Oppenheimer Trust.
—Donald W. Spiro
President,
Oppenheimer Target Fund, Inc.
New York, N.Y.

Inflatable Forbes

SIR: Your inflatable château was pictured in *AA*'s May 9 "Photo Review."

Have you ever thought of an inflatable Malcolm Forbes that would scale the Time-Life Building?
—Joe Doherty
New York Manager,
Advertising Age
New York, N.Y.

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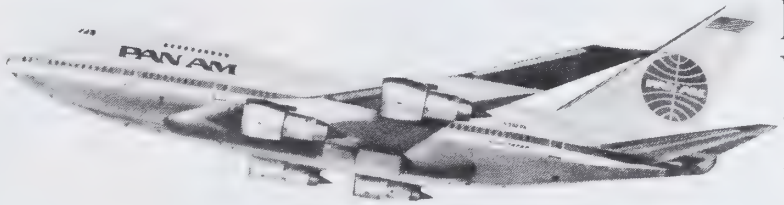

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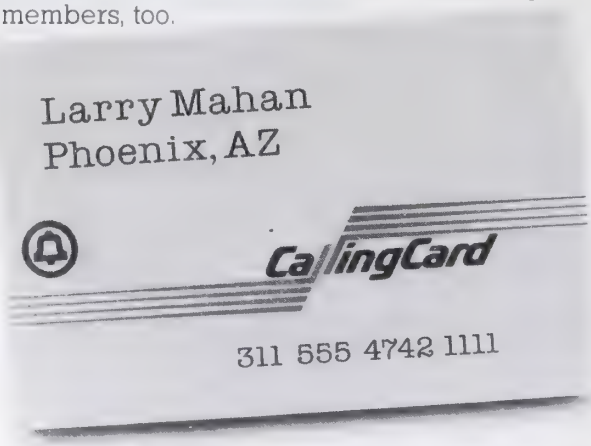


Bell System

Fact and Comment

By Malcolm S. Forbes, Editor-in-Chief

TAT FOR TIT

China's jailing of that Hong Kong editor as an American spy is by way of tat for our refusal to force their lady tennis champion to go home again.

STUPID TO JUNK THE WHOLE LOT

The pluses of the current oil glut are great. But one big minus should give us pause: Too many of the incredibly expensive projects for synfuels are on ice.

Even the $14.8 billion provided by Congress to the U.S. Synthetic Fuels Corp. for synfuels projects is not enough to keep most of the giant private enterprises pouring their own huge sums into the completion of the joint projects.

The drop in oil price, and the prospect of oil and natural gas aplenty for some while, make the cost of synfuels from such plants too high. So the synfuel plant erections may well end up as rusting monuments to a mighty powerful intention.

What the Synthetic Fuels Corp. should now do is seek permission to concentrate all its dough on the completion and operation of at least one sizable project selected as Most Likely to Succeed. Perhaps as many as two scientists could be found who are willing to agree on a choice. If they can't, there must be a commonsensical member of the Synthetic Fuels Corp., the Cabinet or the Administration who can plunk for putting into production one big scheme.

That way, anyway, we'll salvage something instead of having to begin the process all over again if somewhere down the road we have to cross an energy chasm again.

THE BEST POSSIBLE THING BLACKS COULD DO FOR REAGAN

is to field a black presidential candidate next year, as the Reverend Jesse Jackson threatens to do.

MONDALE'S GOT IT BUTTONED UP—A YEAR TOO EARLY

Mondale's so far out in front for the Democratic presidential nomination that he's a shoo-in. Only he can stop himself by, say, crying on a courthouse step à la Senator Muskie, or admitting to having been brainwashed à la Michigan Governor George Romney. Senator Glenn's too late in organizing, and what he's put together isn't. Besides, the Ohio Senator's the most uncharismatic speaker of the lot. The other candidates? They're in the "Who?" category.

So goes the current conventional wisdom.

But I sorely fear that while Mondale's way ahead this year, by next he'll be nixed.

For those of us convinced that President Reagan's reelection is key to the economy's continued recovery, the prospect of Mondale as the Democratic opponent is most appealing. His reiterative one-note replay of tired and irrelevant 1930s New Deal tunes simply isn't attuned to our times. These days people, young, old and in the middle, are mostly fed up feeding ever more feds in the bureaucracy, gagging on ever more governmental red tape. Such silly stuff as these phrases stud his stumping remarks: Reagan has "turned his back on the country, its children, its future." "The President slapped the National Commission on Excellence in Education in the face." "A

deep feeling in this President . . . that only the whip works."

The mold on Mondale's thinking is understandable when you read the views of his economic guru, Harvard professor Robert Reich, summed up in this recent *Business Week* review of Reich's newly published volume, *The Next American Frontier.*

> Our current economic system—which Reich complains is driven by "greed and fear"—is, to him, far less likely to provide lasting prosperity than would a setting of "social justice" in which burdens and benefits are distributed "equitably." If "civic virtue" can somehow supplant endemic cynicism, he says, Americans would be more willing to "innovate, cooperate, and adapt together," directing their rivalries against foreign competitors instead of each other. Although the author seems not to notice, that ideal is redolent of the Soviet Union's evidently impossible dream of creating a "new socialist man."
>
> In his ideal company, the salaries of top management would not be "vastly different" from those at the lowest levels, layoffs would be quite unlikely and decisions on such matters as pay, benefits, training and even on "new investment in research, plant and machinery" would be matters of negotiation. If success happens to benefit shareholders of such companies, so be it, but "one of their central missions is to enhance the lives of their employees."
>
> But the thought that dedicated workers might bungle a company's affairs as badly as any coldly professional management is absent from the book, as is any sense of Reich's having ever been in a factory. Footnotes are not much of a substitute for firsthand observation.

Senator Glenn would be a far more formidable opponent for President Reagan. I much fear that, come convention time, the delegates at the Democratic convention will realize that.

"I TAKE THE SAME CHILDLIKE DELIGHT

in a new honorary degree that an Indian takes in a new scalp and I take no more pains to conceal my joy than an Indian does," said Mark Twain.

Among inanimate things, I, too, find such bestowed pieces of parchment a source of unmitigated happiness. When offered one, I accept with indecent haste, using the phone instead of the mails in case the college should have second thoughts while the letter lingers en route.

DRAWING BY HANDELSMAN; ©1972 THE NEW YORKER MAGAZINE, INC.

"We find you acceptable, sir. You'll be issued a halo, a set of wings, and an honorary doctorate in the subject of your choice."

H.L. Mencken observed, "No decent man would accept a degree he hadn't earned. Honorary degrees are for corporation presidents, bishops, real estate agents, presidents of the United States and other such riffraff." As a most happy riffraffer, I couldn't care less if the Degree's in Latin—a view not shared by Millard Fillmore. He declined an honorary degree from Oxford University during a visit to England in 1855: "No man should in my judgment accept a degree he cannot read."

I would be bothered only slightly if the whole audience boycotted my hooding—which John Quincy Adams did when Harvard conferred an honorary degree on President Andrew Jackson. "Harvard disgraces itself by conferring highest literary honors upon a barbarian who could not write a sentence of grammar and could scarcely spell his own name," said Adams.

Though unapt to be offered a divinity degree, I wouldn't react as did a fellow Scot who refused it because he felt the proffering institution was "not qualified to judge my divinity."

Many of us gleefully share in what Thomas Carlyle once described as the "peculiar ambition of Americans to hobble down to posterity on crutches of capital letters." We deplore the humorist who suggested that the University of Kentucky should award an honorary degree to the four-legged winner of the Derby because "for a change it would be great to give a degree to the whole horse."

HERE TODAY, AND IT WILL BE TOMORROW

Can you think of any newspaper anywhere, anytime, that from birth has enjoyed such phenomenal, near-instant circulation success as has *USA TODAY*?

Imagine, a *national* daily newspaper that within months has achieved a paid daily circulation of 1,100,000—and climbing with each new market it opens.

When Gannett CEO Al Neuharth first got started on this project, I was among the multitudes who thought there was no way it could succeed. With the *Wall Street Journal* for business news and such national-impacting newspapers as the *New York Times, Washington Post* and *L.A. Times,* plus the dailies that dominate every city of consequence in the country, who'd have time or desire for *USA TODAY*?

How wrong (again) can one be?!?

The extraordinary and profuse use of color by the staff of this new daily is jolting a new awareness of graphics' importance in hundreds of editorial offices and news-printing plants. Its colorful, detailed presentation of weather in map and word has magnetic, countrywide appeal. Its sports section is winning coast-to-coast kudos.

USA TODAY has captured a major segment of the higher-income itinerants who are constantly winging it. And stayputters by mounting hundreds of thousands put their 25 cents into *USA TODAY*'s attractive corner dispensers.

Except for Al Neuharth, who'd have thought it?

A HAPPY SIDELIGHT TO OUR PAKISTANI SAFARI

The tale of our recent motorcycle / balloon trip through Pakistan, at the invitation of President Zia, is told by that eminent journalist Cliff May, beginning on page 110.

Except for the small segment of its borders with China, Pakistan has tense relations with its neighbors: Iran, with its unpredictably fanatic Khomeini, and Russian-occupied Afghanistan along Pakistan's western frontiers.

Pakistan's independence monument, Minar—and balloon replica

And finally, India, with whom the Pakistani have thrice warred, including the bloodshed that accompanied this Moslem country's independence from India's huge Hindu populace. The monument memorializing Pakistan's independence is the Minar, and one of the two balloons we flew there is a spectacular, full-scale replica of it.

At the conclusion of our trip, which had widespread media coverage, the following telegram was received by President Zia: "Ballooning club of India offers congratulations to you for start of ballooning in Pakistan stop. Good beginning for the celebration of the bicentenary of man's first flight in balloon stop. We offer cooperation to Pakistan balloon pilots to further this exciting sport in Asia stop. Best wishes to the American balloonists now flying special Minar-shaped balloon in Karachi. [signed] Vishwa Bandhu Gupta, Ballooning Club of India, Safdarjung Airport, New Delhi."

It's heartening that such a happy thing as a balloon is contributing a wee bit to bridging the deep gap between these two bitterly divided neighbors.

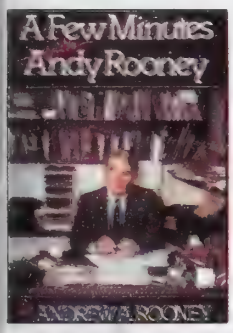
OCCASIONS

are important only if you make 'em so.

IF YOU LIVE LIFE FEARFULLY

you'll die many times before the finals.

BOOKS



● **A Few Minutes with Andy Rooney**—by Andrew A. Rooney (Atheneum, $12.95). This has already been joined on the bestseller list by the sequel, *And More By Andy Rooney*. If we're lucky, I hope in the years ahead there will be ever more of Andy Rooney. We can't have enough of his pithy pinnings of our multiple follies. Andy wreaks havoc on much of the foolishness that only such wit can wilt.

Excerpts: *Women's clothes are always "versatile." An evening gown converts into a sleeping bag or a poncho or maybe a mountain-climbing ensemble. . . . They're always inventing new names for colors: "cranberry," "nutmeg," "sea foam," "celery," "cinnamon," "taupe"—whatever taupe is—"stone," "brick." You know: fine, but what color is it? . . . It seems to me we're mixed up about the way we designate the size of things. Clothes sizes are the worst ones of all. I wear a size 8½ shoe but I wear a size 11 sock. Does this make sense? On the same foot? Why do I wear a size 7½ hat but a size 16½ shirt collar? Doesn't that sound as though I could put my shirt on over my hat with collar buttoned? Why is the average suit size for a man a 40 and the average dress size for a woman a 12? We're not that much bigger.*

● **Living, Loving & Learning**—by Leo Buscaglia, Ph.D., edited by Steven Short (Charles B. Slack, Inc., $13.50). The 3 Rs have nothing like the appeal of Leo Buscaglia's 3 Ls. Since we all want to do more of all three, this happy How To is a bestseller—though his followers are likely to be as faithful as those momentarily addicted to diet and exercise books.

Excerpts: *Not very many of us are really, in the real sense of the word, alive and living fully. As long as you leave your life in the hands of others, you'll never live. You have to take the responsibility for choosing and defining your own life. . . . If you want pain, just go around with expectations. People are not here to meet your expectations. . . . Our parents have taught us how to love. They are our first teachers, but they aren't always the best teachers. We may expect our parents to be perfect. Children always grow up expecting their parents to be perfect and then are very disappointed and disillusioned and really* angered *when they find out that these poor human beings are not. Maybe the point of arriving at adulthood is facing these two people, this man and this woman, and seeing them as ordinary human beings like ourselves, with hangups, with misconceptions, with tenderness, with joy, with sorrow, and with tears, accepting that they are just human beings.*

Other Comments

Often comments by others stimulate, irritate, abuse or amuse this editor's mind.–MSF

Everything's Relative

Our economic problems could be worse. We could have Europe's. Since the mid-1970s, no major European country merits American envy. Total employment in Europe is now less than in 1970, while U.S. employment is 20 million higher. European jobless rates have generally risen more than American, and inflation, though down, has not subsided as rapidly.

—Robert J. Samuelson, *National Journal*

Weight Watcher

When business accepts help from government, it can be like going to bed with a hippopotamus. It's warm and nice for a moment, but then your bedmate rolls over and crushes you.

—Donald Rumsfeld, former Defense Secretary, now CEO of G.D. Searle & Co., *U.S. News & World Report*

Tapping the Top Man

It's interesting, but not surprising, that Mr. Kissinger wasn't brought in more by his own party under Mr. Reagan. He is consulted occasionally, but they want him on tap and not on top.

He has a sense of history and a sense of humor, often at other people's expense, and he doesn't suffer fools gladly, a grave weakness in a capital that has so many of them.

In short, Mr. Kissinger's too hot to handle, even at 60. But as somebody once said, Henry is the only Secretary of State two Presidents have served under. Maybe it was Henry who said that, which may help explain the mystery.

—columnist James Reston

Commencement News

College graduates going out this spring to face the cruel world will not be much cheered by a report from a Nuclear Regulatory Commission panel. The panel, set up to study the qualifications needed to operate a nuclear power plant, decided that requiring a college degree for technicians might actually worsen performance. Following the rule book, not thinking, is the prime requirement. The only thing to be said for hiring college grads, the report said, was that it might reassure the public.

—*Wall Street Journal*

This Is Judgment?

If you're angry with lenient judges, D.A. Robert Morgenthau is on your side. A man who manages walk-ups in the East 80s tricked the elderly and unsophisticated into excessive rents as "sublessees." He victimized the poor by evicting them forcibly. His method? Fear. Threats against their lives; threats of robbery, burglary, property damage. He was indicted on a series of felony counts. He pleaded guilty to defraud, in the first degree; guilty to the crime of coercion, in the first degree. Each charge carried a four-year sentence.

Manhattan Supreme Court Justice Milton Williams recently let the creep go free. On probation. The sole punishment was that henceforth he must sin no more.

—Cindy Adams, *New York Post*

Dying is a very dull, dreary affair and my advice to you is to have nothing to do with it.

—Somerset Maugham

MX Is the Problem

The MX attempts three things I don't believe can be done at once. It's supposed to be powerful enough to constitute a knockout threat to Soviet missiles, be invulnerable to a Soviet knockout and be land-based. At 95 tons, it's too big, too hard to move, almost impossible to hide and a valuable and tempting target.

If the MX were studied carefully, it would emerge that we cannot have it in a properly survivable mode, nor do we need it.

—McGeorge Bundy, former national security adviser, *New York Times*

Face Lift

The other night I had dinner [at La Grenouille] with two friends, both men, one a designer, the other an architect. The designer said: "Nowadays it's fashionable to be homely. At least in Hollywood. Consider the men. Dustin Hoffman, Al Pacino, Robert de Niro, Richard Dreyfuss, Richard Benjamin—"

At this point Kirk Douglas passed our table on his way to the men's room. He looked remarkably well—his skin clear and smooth, his chin line clear and taut. The architect remarked: "Anyway, some of the older stars know how to take care of themselves." Which prompted the designer to ask me: "When did *you* have *your* face lifted?"

"Two years ago." The designer then asked: "Was it painful?"

"Not at all. At first your face feels a bit stiff. A little like a mask. But that goes away within a week or two."

—Truman Capote, *Esquire*

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Fact and Comment II

By M.S. Forbes Jr., Deputy Editor-in-Chief

STICK TO YOUR GUNS, MR. PRESIDENT!

In the name of reducing future budget deficits, congressional Democrats and a number of Republicans want to scrap indexing the tax code, which takes effect in 1985. President Reagan will be making a grave mistake if he caves in to this pressure.

The arguments against indexing just don't hold up. Many confuse it with indexing of wages or Social Security benefits. This comparison is mistaken.

Inflation gives the government windfall revenues because, under our tax code, additional income is taxed at progressively higher rates. A 10% increase in wages translates into a 16% increase in federal taxes. Economists call this phenomenon "bracket creep."

During the 1970s, individual income taxes rose substantially, thanks to bracket creep, even though Congress never raised tax rates.

Indexing means that Uncle Sam's tax receipts won't rise faster than inflation, which helps explain why it is so unpopular with so many politicos.

Indexing is fair. Bracket creep hits lower- and middle-income taxpayers far harder than the rich because the tax brackets are narrower at the lower-income levels. In an inflationary environment, a person earning $10,000 would see his federal tax burden rising, proportionately, 4 times faster than someone earning $100,000.

Repeal of indexing would reduce deficits only if inflation takes off again. It says something about Congress' inability to control spending that the only times in the past 15 years we have had balanced or near-balanced budgets was when inflation was roaring.

Does it make sense to give politicians a revenue windfall for fanning inflation? Does it help the economy to raise disproportionately the tax burden on middle- and lower-income earners?

NONSENSE ON UNISEX

Congress is considering legislation to bar sex distinctions in the setting of insurance rates and benefits. The bill, introduced by Senator Robert Packwood and Representative John Dingell and labeled the Fair Insurance Practices Act, is being pushed by feminist groups, which argue that sex discrimination in insurance premiums and benefits is unjust. Actually, the proposed "unisex" law is a prime example of good intentions that will lead to some unintentionally bad results.

It is true that women pay more for annuities with a given level of benefits because they live longer than men. For the same reason, their benefits are lower than those of men in so-called contributory pension funds (that is, funds where employees make contributions; noncontributory plans are funded entirely by the employer and their benefits are equal for both sexes).

On the other hand, women, especially those who are single and between the ages of 17 and 25, pay significantly less for auto insurance. The premiums for life insurance for most women are also lower.

The legislation Congress is now considering would cost the fairer sex an additional $700 million a year in auto premiums and more than $360 million per annum for life insurance payments. Single working women with children would be hit especially hard. On the whole, women would pay more for their insurance needs over their lifetimes.

This bill would also require that existing pension plans "top up" payments. If a plan was paying men $400 a month and women, say, $350 a month (remember women, on average, live five years longer than men do), the females' pension payments would be upped to $400.

Topping up wouldn't influence most corporate plans because they are noncontributory, and thus their payments are nondiscriminatory, but it would sizably impact plans of states and cities, which are contributory. The Packwood-Dingell bill would cost these funds more than $1 billion a year.

Packwood-Dingell would mean, in addition, rewriting millions of existing individual insurance policies, which would be chaotic and costly.

Congress should kill this well-meaning, but misbegotten, legislation altogether.

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Edited by Thomas O'Donnell

BE PREPARED

THE STRONG STOCK MARKET SINCE LAST AUGUST coupled with a sharp improvement in household balance sheets have done wonders for consumer confidence. The Conference Board's most recent survey of 5,000 homes shows consumer optimism to be as high as it has ever been in the poll's 15-year history. The University of Michigan's index of consumer confidence, another highly regarded indicator, is up nearly 30% this year and now stands at its highest level in six years.

Inventory slashing is over

THAT CONSUMER CONFIDENCE IS ALREADY RINGING UP higher sales at the cash register—retail sales in April rose 1.6%, following a revised 1.7% gain in March—and must soon boost business confidence as well. Inventory liquidation has just about come to an end. The all-important ratio of inventory to sales has dropped to its lowest level in nearly two years. That means business activity must pick up from here on. New orders for hard goods rose by 2.4% in April. The biggest gain was scored by appliance sales, which are up 16% so far this year, indicating that households are replacing—and no longer repairing—worn out white goods. Autos, which now average seven years of age, will be the next consumer product to get a lift from the replacement cycle, giving the economy another boost.

Consumer spending will gain in second half

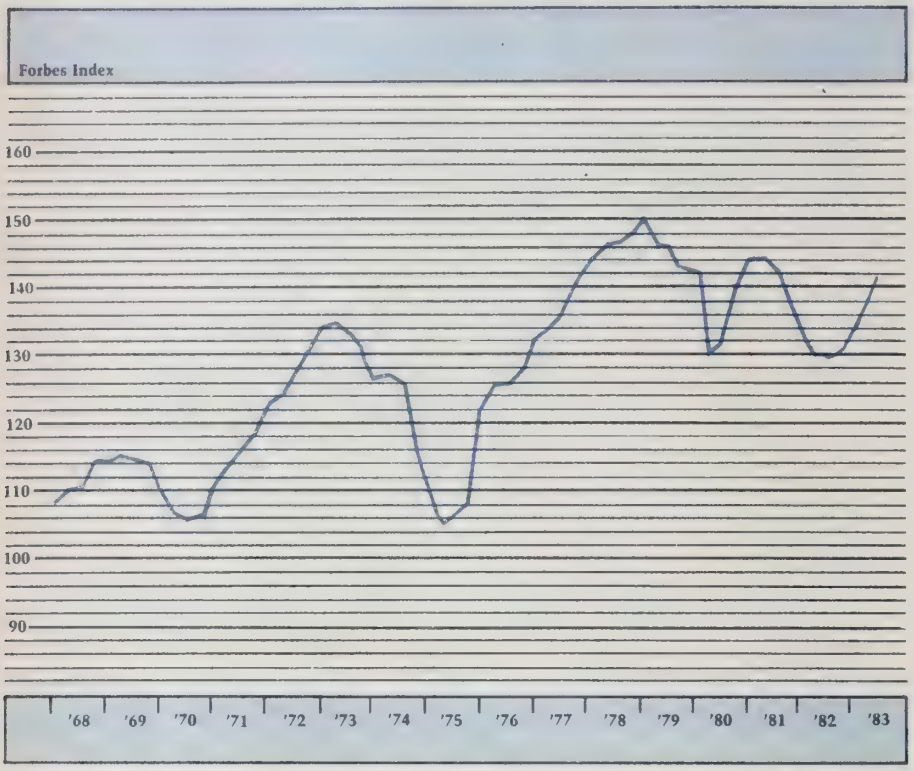
THUS, CONSUMER SPENDING, strong as it has been thus far, will gain strength during the second half and remain strong as 1984 begins. No great mystery about where their spending money will come from. The 33 million Americans who directly own shares—another 150 million are indirect stock owners through pension funds and through other institutions—will get more generous capital gains treatment on profits earned since August. What's Ahead calculates the rally may put $30 billion into the economy. And this year's tax refunds, much of which have yet to be disbursed and spent, will total $12 billion more than they did last year.

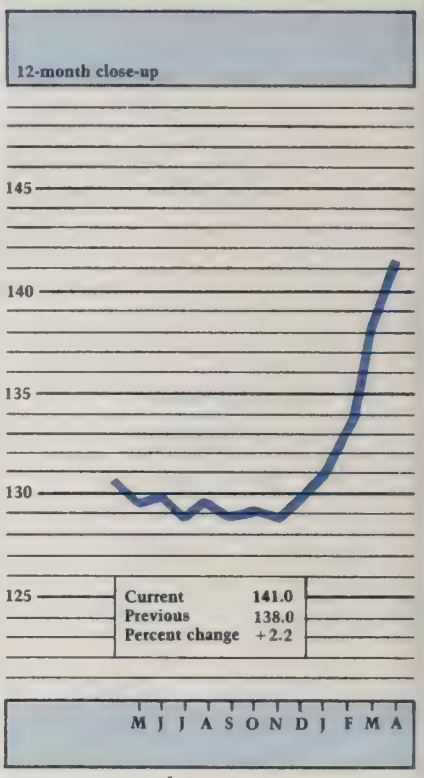
Excessive caution can be costly

WHAT'S AHEAD SUSPECTS THAT THE STRENGTH of the recovery will take a good many businesses by surprise in coming months. Excessive caution can be costly. Purchasing managers are stepping up their buying. In April vendor deliveries slowed for the third consecutive month, and the managers are trying to avoid supply bottlenecks that have plagued recoveries in the past. They know that slow deliveries could lead to lost business.

There is plenty of room for the good news. Although industrial capacity utilization has already risen over 4% from last fall's low, it's still only a bit above 71%. Even allowing for the fact that a good deal of the capacity to spare is older and less efficient, increased orders won't quickly lead to inflationary increases in prices.

The Forbes Index





Moving up. The Forbes Index posted an impressive 2.2% rise, matching a similar increase in the previous reporting period.

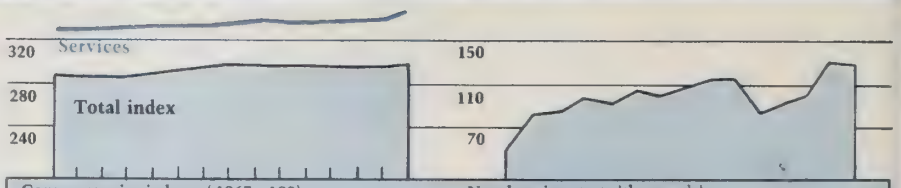
The willingness of consumers to spend was a major reason for the increase. Consumers have money in their pockets because personal income was up 0.8% in April, following a 0.6% jump in March. At the same time, initial unemployment claims dropped 2.0% in April, compared with a 1.4% rise the previous month.

Inflation remains under control. The Consumer Price Index rose 0.7% during the latest reporting period, but much of that is attributable to a new gasoline tax. The service sector index increased 0.5% against a 0.1% rise a month earlier. New housing starts were off slightly. The 1.7% dip is deceiving, however, because it follows the unusually high increases in the first quarter of the year.

The Forbes Index Components

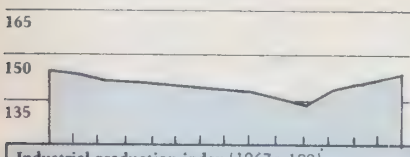
The FORBES Index is a measure of U.S. economic activity composed of eight equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, the level of new orders for durable goods compared with manufacturers' inventories, total retail sales, new housing starts, personal income, the change in the amount of consumer installment debt outstanding.

To measure these eight elements, FORBES monitors 11 series of U.S. government data. The last 14 months' data for each series are presented at right.

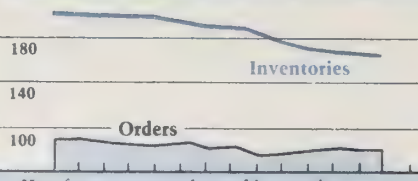


Consumer price indexes (1967 = 100) all urban consumers, unadjusted (Dept. of Labor)

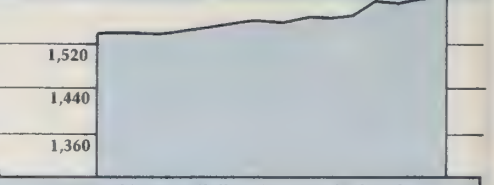
New housing starts (thousands) privately owned, unadjusted (Dept. of Commerce)



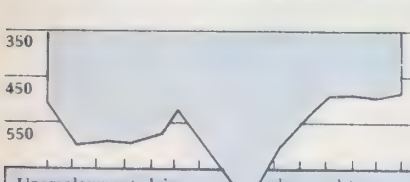
Industrial production index (1967 = 100) Seasonally adjusted (Federal Reserve)



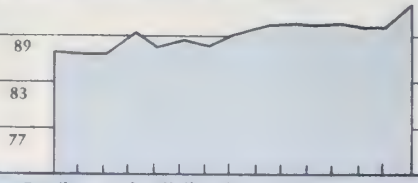
Manufacturers new orders and inventories ($billions) seasonally (Dept. of Commerce)



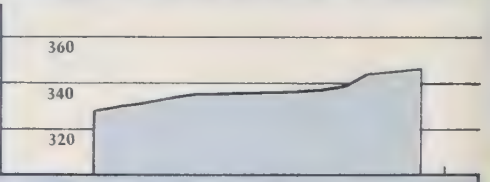
Personal income ($billions) wage and salary disbursements, seasonally adjusted (Dept. of Commerce)



Unemployment claims (thousands) seasonally adjusted (Dept. of Labor)



Retail store sales ($billions) seasonally adjusted (Dept. of Commerce)



Consumer installment credit ($billions) total, seasonally adjusted (Federal Reserve)

F M A M J J A S O N D J F M A F M A M J J A S O N D J F M A F M A M J J A S O N D J F M A

© 1983, Peugeot Motors of America, Inc.

This car is quietly tuning itself. It is the Peugeot 505S.

It is Peugeot's view that cars should not require constant, annoying trips to the shop for engine tune-ups.

So, under the Peugeot's hood are spark plugs tipped with silver. Ignition by magnetic pulse. An exhaust-gas "sniffer" made of zirconia and platinum.

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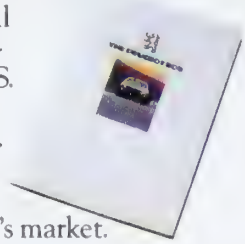


PEUGEOT

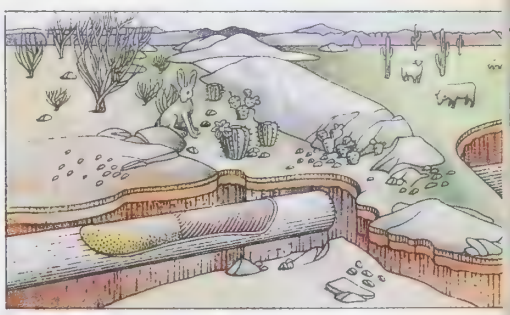
"Four feet below me, there's a Southern Pacific freight trai with tank cars fifteen miles long."

Homer Corrodi,
District Superintendent
Southern Pacific
Pipe Lines, Inc.

can't see it, and you can't hear ut buried beneath the Arizona rt, there's a transportation em that's equivalent to a railroad n line.

's a Southern Pacific pipeline vork, delivering most of the gaso- diesel, and jet fuel Arizona . Every day, our pipelines can deliver as much refined petroleum as 300 railroad tank cars. But in this case, the "cars" are liquid fuel flowing through the pipeline in batches that can be more than fifteen miles long. With precise computer control and constant pressure, 65 different fuels can move through the system at the same time, without getting mixed.

And they move with remarkable efficiency. By truck, the cost of transporting fuel to Arizona from refineries in California and Texas would be around $4.00 a barrel. Our underground pipelines bring in the same barrel for about 80 cents. The result is lower fuel costs for consumers. And a steady flow of profits for Southern Pacific.



Pressure keeps different types of fuel separated as they move through SP's underground pipelines. In Arizona, millions of gallons are delivered each week, without disturbing the delicate desert environment.

There's a hidden bonus in all this for everyone who lives in the area our pipelines serve: the fuel travels much more safely than it would by highway. And it's delivered without atmospheric pollution.

Southern Pacific's Arizona pipelines are part of a 2,800-mile network serving six western states. The system includes the Black Mesa pipeline, the longest coal slurry pipeline ever built. The Black Mesa line carries five million tons of coal a year under 273 miles of western desert. Its success has brought economic development to the Navajo and Hopi tribes who own the land where the coal is mined, and has attracted the interest of governments and industries throughout the world.

As extensive as Southern Pacific's pipeline operations are, they represent only a small part of a diversified corporation with interests in real estate and development, transportation, natural resources, insurance, equipment leasing, energy, printing, agriculture and forestry.

We began life as the railroad that opened the West, more than a hundred years ago. Since then, our vision has taken us far beyond the reach of our rails and the dreams of our founders. Nevertheless, Southern Pacific remains today what it was in 1862: a young company with fresh ideas, bold plans, and a future filled with promise.

Southern Pacific

Official sponsor for the 1984 Olympic Games

The Navy needed some cargo ships. Congress said no. Now the ships are being built, and we're all paying more.

Damn the Congress, full speed ahead

By Jill Andresky

THE U.S. NAVY badly needs 13 cargo ships in the Indian Ocean to supply the fleet. Congress, looking for a way to cut defense spending without sacrificing pet projects or losing votes at home, refused the money. So the Navy has discovered the wonderful world of off-balance-sheet financing. As a result, the ships are being built and the taxpayers may well pay billions more than they would have otherwise. Some astute investors may also get unusually generous tax deductions.

This all stems from a decision by the Navy to charter rather than to buy the ships, and the change is possible because of a novel interpretation of IRS regulations for service contracts. Here is what is happening:

1) General Dynamics, Maersk Line and Waterman Steamship have signed agreements with the Navy to build or convert the 13 ships.

2) Manufacturers Hanover and Morgan Guaranty, among others, are lending construction funds, to the tune of $1.9 billion.

3) About a year from now, investors will buy equity shares in the vessels, paying off the construction loans.

4) Then the Navy contracts for "transportation services" and agrees to pay the ships' investor-owners through operating agents at regular intervals.

It's simple enough, and because the deal is being structured as a service contract, specific congressional appropriations aren't required. The tax benefits are unusually attractive, too. Because service contracts are involved instead of leases, the owners of the ships will get a 10% investment tax credit. That amounts to 10% of the $178 million purchase price per ship sliced off their tax bills the first year. Then comes five years of accelerated depreciation deductions. Over the first three years alone, all these benefits could add up to $1.3 billion, on a total investment of $2.4 billion. But don't call your broker and try to get a piece of this deal. Wall Streeters say it's so good that the equity positions will almost surely be snapped up by the construction lenders and shipbuilders.

Now back to the curious math that

Congress has forced on the Navy. Its original position was that service contracts are cheaper than buying because tax breaks are passed along in the form of lower fees. Unfortunately, the Navy didn't figure quite right—at least according to the Joint Committee on Taxation. It claims that the long-term contracts actually cost the government about 12% more than buying—$20 million per ship—when you include $60 million per ship in lost tax revenues.

That's a big problem for the IRS, but something the Navy wasn't including in its calculations. State and local governments can use sale-leasebacks profitably, since the deductions they generate come off tax bills that go to Washington. But similar transactions for the federal government are ludicrous. When an agency generates tax benefits, the revenue loss comes directly out of the Treasury's pocket.

Had enough? Wait. The Navy is new to the tax shelter game, so it is guaranteeing investors an impressive 11.745% aftertax rate of return, plus operating expenses. Translation: If the IRS decides these transactions are ineligible for any tax benefits, which is likely given the shaky grounds for calling Navy leases service contracts, the Navy's payments simply rise dollar for dollar to offset lost aftertax income.

There are questions about enforceability, of course, but the Navy even guarantees to pay any IRS fines, certain legal fees and lost interest. "Investors can't lose," says Stuart Ober, president of Woodstock, N.Y.-based Securities Investigations, which evaluates tax shelters. "This is a situation where you've got low risk and high reward."

The biggest risk is that Congress will determine that the Navy never had the right to protect its business partners against tax losses in the first place. Then the shipowners will have to face the IRS unprotected. In addition, if Congress acts before the equity offering is sold—probably a year from now—then Manufacturers Hanover and Morgan may well wind up with their own fleet of cargo ships.

Congress has become a little nervous about such deals and may try to

stop future transactions of this sort. Late last month Representative J.J. Pickle (D-Tex.) introduced legislation that would eliminate tax benefits for private investors engaged in leasing deals with the government or other nontaxpaying entities.

You can be sure that this effort will see stern resistance from everyone who might benefit—and that includes states, municipalities and other federal agencies already eyeing the potential of this new form of back-door financing. Right now the Air Force is talking about leasing trainer jets from private investors, and a plan is kicking around Washington for the Energy Department to sell and lease back the Clinch River Breeder reactor.

The bottom line: Once deals of this sort really catch on, lots of congressmen may wish they had let the Navy buy its cargo ships in the first place. ■

It's not infallible, but here's a handy way for you to judge whether the stock market is too high or too low.

The rule of 20

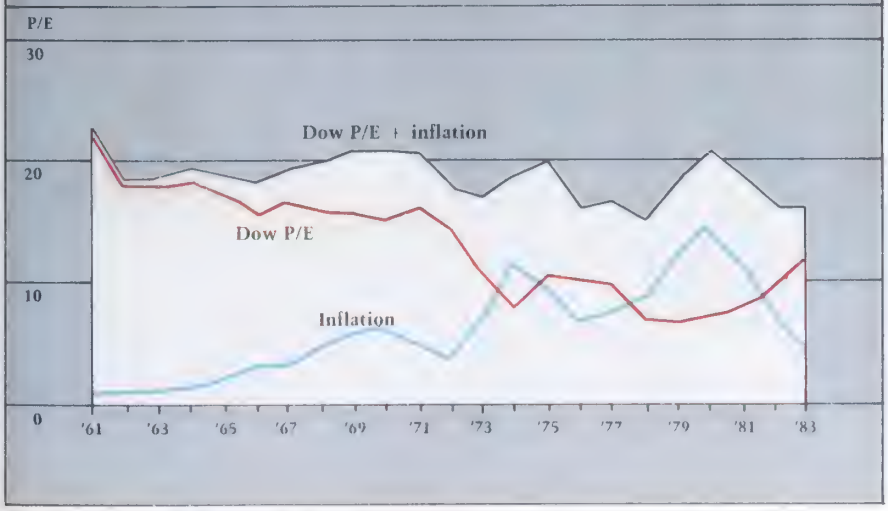
By Steve Kichen

ALMOST EVERY PERSON who trades in stocks now knows that there has come to be an inverse relationship between price-to-earnings multiples and the rate of inflation. With a 15% inflation rate, for example, a firm would need a 30% return on investment in order to show a real return of 15%. In this case, half the profit goes to offset inflation. With a lower rate of inflation, a given rate of profit is worth more in real terms and, therefore, a stock with given earnings is worth more.

From this comes the rule of 20. Listen to Eric Miller, chief investment officer at Donaldson, Lufkin & Jenrette: "As a general principle the rule of 20 says that the P/E on the Dow added to the inflation rate has a tendency to move down or up to the number 20." All other things being equal, therefore, low inflation means a high average P/E. The accompanying chart illustrates this point.

Golden rule?

For more than 20 years the rate of inflation added to the P/E multiple on the Dow industrials has hovered near the number 20. If this relationship is still valid, it could mean further growth in the Dow average.



The fact is that the rule of 20 has held fairly well for more than 20 years—but within a fairly wide band. (In fact, the sum has averaged only 18.5 instead of 20.)

Way back in 1961 when the CPI rose just 1%, the Dow sold at 21.7 times earnings, and the sum of the two numbers was 22.7. That is a record that hasn't been broken since. The Dow plus inflation rose over 20 in four other instances—the last time being 1980 when inflation was 13.5 and the P/E on the Dow 7.3—but has never broken 21. Their sum hit a low of 15 in 1978. Look at the chart: Notice how low the P/E line drops when inflation starts out of control in the early Seventies.

So, where does the stock market stand today on the rule of 20? A case can be made from the rule that the stock market is still substantially undervalued. If one excludes companies that are in the red, the remaining DJI stocks sold recently at 12.8 times earnings. Add to that the current inflation rate—around 3%—and you get 15.8. That puts the market at the second-lowest point since 1961, according to Tom Nourse, of Nourse Associates in San Diego, and gives it plenty of room on the upside even without anticipating higher earnings. "On this basis a Dow of around 1430—even on depressed earnings—is not inconceivable," says Nourse. If you factor in the prospect of improved earnings for the stocks in the DJI, you come up with a much higher ceiling than Nourse's 1430.

But Steven Leuthold of the Minneapolis-based Leuthold Group signals a flag of caution. "Just as the CPI and the Producer Price Index overstated inflation in the past, we think they are understating inflation at the present time." A better assumption for inflation, he argues, is around 5%. That higher assumption doesn't leave the DJI much room on the upside for the present, Leuthold argues.

It turns out, then, that your assumptions about the state of the economy determine how you interpret the rule of 20. A magic formula the rule is not, but simply a handy tool to add to your investment kit. ■

Some economists think interest rates are starting to rise again. The Fed's Tony Solomon thinks they are quite wrong.

Solomon's choice

By Ben Weberman

ANTHONY M. SOLOMON has not yet made the pages of *People* magazine and is unlikely to; except among bankers his name is almost unknown. Yet Solomon is an influential man. He is president of the Federal Reserve Bank of New York and a member of the Federal Open Market Committee. Solomon may be the most important man in the Federal Reserve System after the chairman, and what he says and does has an effect upon us all.

Solomon, who rarely speaks for publication, recently talked with FORBES about interest rates and the economy. It was a sober picture he drew, but not a dismal one.

"Yes, the second-quarter GNP is coming in somewhat stronger than we originally expected," he says. "But I still believe that growth for the year as a whole—fourth quarter 1982 to fourth quarter 1983—may not be more than 4½%. That's quite moderate when you realize that the average first-year growth out of a recession is close to 7%."

Why are many forecasters predicting a more powerful recovery? Because they expect stronger consumer spending than Solomon believes possible. "To get a 7% recovery strictly out of consumer spending is almost impossible," he says. "Savings are already as low as 5.9% of personal disposable income, so the consumer won't do much more. For a strong recovery you would also have to have a significant increase in capital investment and a significant export recovery. At these levels of the dollar, I don't see that happening."

On the happier side, Solomon sees only modest increases in commodity prices, more productivity gains and moderate wage settlements into or through next year. So he does not anticipate that the inflation curve will turn up for a while.

Solomon also sees hope in the apparently growing eagerness for lower interest rates because, at this moment at least, lower interest rates are what all the nations need. There is a rare consensus on that. Solomon: "High interest rates here tend to attract more capital and to strengthen the dollar." That's bad. "The strong dollar means a more severe debt burden for the less-developed countries because

Anthony Solomon of the Federal Reserve Bank of New York
A world consensus for lower interest rates.

interest requirements are in dollars, whereas a large part of the foreign exchange revenues are in the weaker currencies." That's bad, too. Finally, the domestic impact: "High interest rates also hurt this country because the strength that is brought to the dollar makes our exports less competitive."

Solomon's views about lower interest rates are particularly significant, coming as they do in the wake of the recent news that the money supply has been growing 2½ times as fast as the Fed wants it to. Solomon seems to suggest that the monetary authorities remain relatively unworried about a new outburst of inflation but relatively worried about how strong the recovery will be. If that is their view, then they will probably avoid a restrictive policy. Money supply figures or no, the present signs point to a continued decline in U.S. interest rates. ■

Salt Lake City is the home of the Mormon Church, whose members are hardworking and thrifty. Why then do they fall for so many scams?

Now you see it, now you don't

By Richard L. Stern

Dee Jay Hammon, an engineer with Morton Thiokol, figured it was a deal he couldn't refuse. It came, after all, from Grant Affleck, a major Utah real estate developer and member in good standing of the Church of Jesus Christ of Latter-day Saints. Visiting Hammon at his Brigham City home, Affleck proposed a deal. Affleck brought with him a finance company official who would give Hammon a second mortgage on his house. If Hammon would then lend the cash to Afco, Affleck's company, it would service the second mortgage and pay him an additional 10% of the amount. Since second mortgage rates were then in the neighborhood of 20%, Afco was, in effect, offering nearly 30% for money.

Too good to be true? Much. Today 350 homeowners face foreclosure proceedings as a result of those second mortgages. Afco collapsed last year, taking their investments with it. But the mortgages incurred to make the investments remained.

Homeowners weren't the only targets. Seven percent of Utah's dentists and 3% of its doctors and even a few lawyers and CPAs invested in various Affleck schemes, according to Utah State Attorney General David Wilkinson. And Washington, D.C.-based columnist Jack Anderson, a Utah Mormon, admits that he foolishly sent off $12,000 after hearing of it from a friend back in Salt Lake.

Afco was very accommodating. You didn't want your return in cash? It would lease you a BMW or Mercedes with Afco servicing the lease. Or Afco would set up a trust for your child's education or his 18-month Mormon mission, which typically costs families $300 to $400 a month. Affleck and Afco took more than $20 million from over 2,000 investors.

And who would fear for the safety of his money? Affleck was no fly-by-night, no stranger. He was one of us. Besides, there he was, developing Utah's largest housing subdivision, as well as a time-share resort outside Salt Lake. But what the gullible investors did not know was that in 1981 Affleck was staggering under big bank loans at 23% interest. Debt service alone was $146,000 a month, and cash flow was drying up amid the recession. Randy Dryer is now attorney for the bankruptcy trustee for Afco. He says that Affleck, apparently desperate for money, began making his seductive offers to investors—a high return and no cash investment—when he ran into trouble servicing the debts from his realty projects. Because Affleck fears for his safety (he claims his elaborate residence was shot up), he is now somewhere in California.

But Affleck's was only one of at least ten separate schemes thus far uncovered in Utah that, over the last several years, have taken at least 9,000 people (1 out of every 100 adults in the state) for what Brent Ward, U.S. Attorney for Utah, estimates is more than $200 million. In at least three of those schemes federal bankruptcy court authorities had to use auditoriums able to seat 1,000 to accommodate all the victims.

Why Utah? Why Salt Lake City? With a population of only 165,000 but over 10% of the population of the state, Salt Lake City is a neighborly town, essentially still small-town America. It has attributes that are disappearing elsewhere—real neighborhoods and neighborliness, safe streets and some of the nation's best skiing, hunting and fishing minutes away in the spectacular Wasatch Mountains. Rush-hour traffic is something you hear happens in Denver. Add to all that the fact that 70% of the population is Mormon, one of the most homogeneous, hardworking and thrifty communities in America.

And yet all that, sad to say, creates a fertile soil for swindles. Mormon lay preachers—it is essentially a lay church—see nothing wrong with getting a good return on their money. When an outfit like Afco treats a lay preacher well, that preacher can become an eloquent carrier of good tidings. In their innocence they sometimes tell their parishioners, who tell other church members, who tell neighbors. Most of those bilked are Mormons, and the bilkers, too, profess to be upstanding members of the church and use church connections.

S. Hal Haycock, for instance, pleaded guilty last year to fraud charges and is now serving a ten-year sentence in federal prison. Haycock reportedly worked part-time as an organist in a mortuary. That, and his reputation as a good churchman, helped lure widows and others to invest in his Grove Finance Co. He was an upright and wealthy notable in the town of Pleasant Grove (pop. 10,000), 40 miles from Salt Lake. Some 1,600 investors filed $16.5 million in claims against Haycock.

There was a diamond scheme run by one Jon C. Vasilacopulos, who promised a 30%-per-month return. Vasilacopulos and his salesmen, some

Independent Clearing House "asset" in Mexico
***The reality* (above), *and the sales pitch* (below).**

of whom spoke of having just returned from missionary work, said they could buy diamonds cheap—direct from De Beers—and sell high, using some of the profits to pay the 30%. According to his bankruptcy trustee, R. Todd Neilson of Main, Hurdman, Vasilacopulos took in an estimated $12 million to $18 million.

Veldon Taylor "guaranteed" investors 30% a year on behalf of his T&D Management, which would earn the money speculating in commodities. Taylor garnered $4 million. His salesmen pitched their wares of pork bellies and such at local Mormon ward meetings. Among the investors: a 65-year-old widow who reportedly lost $100,000 from her husband's life insurance policy. And Taylor was a charitable man, with an AAA rating at the local Better Business Bureau.

Taylor's scheme was small potatoes compared with what U.S. attorney Ward calls "the granddaddy" of all the recent scams. About 5,000 people in 40 states, but primarily Utah, Idaho, Colorado, California and Texas, may have invested as much as $40 million in a company called Independent Clearing House and its affiliates. Thus far only about $150,000 has been recovered. Several weeks ago Ward announced indictments of 21 persons in the alleged scam, including Richard Cardall Sr., who is alleged to have started Clearing House soon after he was released from prison on mail fraud charges.

Clearing House was a Ponzi scheme, pure and simple. Investors were promised a 104% per annum return, says former bankruptcy trustee Ron Bagley. Salesmen told potential investors of an elaborate factoring plan that would give Clearing House those big returns. In fact, says Bagley, not one piece of business was done. Early investors were paid with cash collected from later investors. A Denver woman, for instance, tested the waters with $1,000 and got her promised return. The classic Ponzi pattern: She then plunged in with $200,000, which she never got back.

Authorities describe the Clearing House operation as one of the most elaborate and best-thought-out scams they have seen. Bagley has uncovered a memo that allegedly lays out the master plan for the latter phases of the scam, including the use of Chapter 11 to unwind the operation.

Trustee Bagley says part of that scam continues today—an elaborate public relations effort to convince investors that it was the government's closing down of Clearing House that ruined their wonderful investment opportunity. As an apparent result, there have been death threats against insiders who seemed to be cooperating with the government. Investors had been told by salesmen that Clearing House possessed vast assets: for example, a condo development named Estrella Del Mar worth over $100 million in Bahia Kino in Mexico. Bagley says he visited the Mexican property. The "development" consists of half-built, shoddily constructed huts, surrounded by a virtual desert wasteland and abandoned six years ago. Bagley doubts that Clearing House holds the title to the property, but so meager have been recovered assets that he did not have $5,000 for a title search.

Blinded by what they thought was good fortune, the victims rarely checked the particulars of these deals. Mormon Elder Hugh Pinnock, a high church official, notes that underlying all the explanations for why the Mormon community was so vulnerable is another element—simple greed. And greed is not a trait confined to Mormons: The Clearing House scheme took in many non-Mormons, too.

But the very qualities Utahans pride themselves on—their faith in religion and one another and hard work and honesty—left them wide open for a variety of Ponzi schemes. Local leaders hope all the local publicity has put an end to scams.

But they go on. Barbers, secretaries, housewives and construction workers are listed as the top officials of penny stocks that are easily issued intrastate under Utah law and thus without SEC oversight. Some hype mining claims, available for $6 filing fees. Others will serve as shell companies for con men promoters to sell nationally to unwary investors.

The moral? The moral is so trite and so obvious we blush to repeat it: Never take people solely at face value, and don't invest your money without checking carefully first. ■

ESTRELLA DEL MAR

Jewel Of The Sea Of Cortez

Estrella Del Mar captures the warmth and grace of Old World Mexico, a time fondly remembered for its charm, elegance and tranquility. Set in a place where the sun dances daily on a sea as blue as the turquoise sky it mirrors. Where broad white sand beaches outline a necklace of charming islands, and purple shadows fill the folds of distant mountains.

Here you can inhale the black velvet of balmy evenings under a blanket of stars. Share casually elegant moments with friends over wine and cheese. Spend days to be remembered always. At Estrella Del Mar, a once-in-a-lifetime opportunity to capture a full measure of the pleasure you deserve from life.

White walls and red tile roofs mark the newest "in spot" to emerge along the unspoiled west coast of Mexico. The 4,000 acres of Estrella Del Mar are a world apart from the humdrum, yet convenient to major population centers. As such it represents some of the choicest remaining beachfront property on the North American Continent.

It is located on the shores of the Sea of Cortez, just 60 miles from Hermosillo by paved highway. Bustling Hermosillo, with its cathedrals and university, is served by two commercial airlines daily, as well as crack passenger trains.

Atlantic Richfield is taking a flier in office automation. But what a far cry from the freewheeling days when anything less than $1 billion was small stuff in the oil business.

Arco steps out cautiously

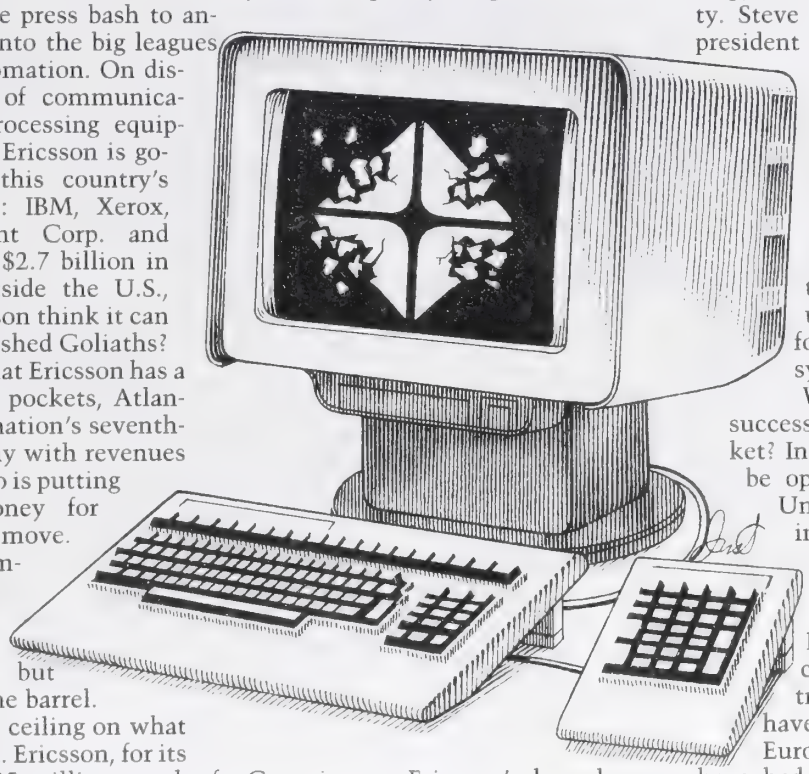
By Carol E. Curtis

THE SETTING IS New York's elegant Hotel Pierre. The assembled reporters are to be fed, but first, the news. L.M. Ericsson, a Swedish telecommunications company relatively little known in the U.S., is staging the press bash to announce its entry into the big leagues in U.S. office automation. On display is an array of communications and data processing equipment with which Ericsson is going to take on this country's electronics giants: IBM, Xerox, Digital Equipment Corp. and Wang. With only $2.7 billion in sales, mostly outside the U.S., what makes Ericsson think it can take on the established Goliaths?

The answer is that Ericsson has a partner with deep pockets, Atlantic Richfield, the nation's seventh-largest oil company with revenues of $26 billion. Arco is putting up half the money for Ericsson's U.S. move. Since the two companies linked up three years ago, Arco has invested $140 million, but that is a drop in the barrel.

Arco has put no ceiling on what it intends to spend. Ericsson, for its part, is selling $225 million worth of common stock in the U.S. to help finance its share of the deal. By 1986, according to Ericsson Information Systems President Hakan Ledin, the joint venture aims to have 5% of the total U.S. market in office PBX systems, and 5% in data terminals.

In trying to break into this most glamorous of businesses, Arco is choosing quite a different path than Exxon took earlier. Exxon, essentially, bought small companies, melded them together and today runs a $200 million manufacturer of office systems. But to get that far, Exxon has already invested $1.5 billion and has yet to reap anything but red ink.



Counting on Ericsson's knowhow—Ericsson will run the show—Arco hopes to avoid a lot of the startup costs that afflicted Exxon as a newcomer to office automation.

Clearly, Arco thinks it can get around the essential incompatibilities between slow-moving, otherwise-occupied, capital-intensive oil and fast-changing, people-intensive data processing. "We like the business, and we feel we've got a very good and knowledgeable partner," says Robert Anderson, the tall, soft-spoken chairman of Arco who personally negotiated the joint venture.

When Arco bought the Anaconda copper company in 1977—an investment which has yet to pay off—Arco inherited a joint venture with Ericsson in Brazil, and the relationship worked well. So when Ericsson, a 107-year-old firm with a solid reputation in telecommunications, came looking for a venture partner for its foray into the U.S., Arco was a natural choice.

The agreement calls for Arco to leave all day-to-day management decisions to Ericsson. At the Pierre press conference, for example, Arco representatives were conspicuously absent. Exxon, by contrast, involved itself extensively in running its information systems subsidiary. If Exxon plunged in, Arco can be said to be testing the water.

It Arco brings money to the partnership, what does Ericsson bring? Plenty. Steve Stevens, a marketing vice president at Ericsson, contends that Ericsson's long experience in communications will give it entree into the U.S. office market. Communications is a weak link in the office systems offered by most big competitors, he maintains. So Stevens aims to use Ericsson's PBX products to get the company's foot in the door for its bank systems and data terminals.

What are the chances for success in an already crowded market? In one big way, Ericsson will be operating at a disadvantage. Unlike most large U.S. firms in the field, it has only a fledgling in-house sales force here. That could prove a critical deficiency. Indeed, while newer American companies and more-traditional suppliers like ITT have had great success selling in Europe, European competitors have had an abysmal record selling here. Thus, neither Arco nor Ericsson has a sure thing going for it.

Back at the Pierre, Ericsson's Ledin dismisses such doubts and argues that Arco's approach and Exxon's are worlds apart. "This is a better way to do it," he says, slowly savoring his wine. "Just Arco dollars. We supply the management." ■

In current fantasy, all big companies are Darth Vader and all entrepreneurs are Luke Skywalker. Zilog-Exxon shows that reality is far more complex.

Remember "Spare the rod..."?

By Kathleen K. Wiegner

When Zilog Inc., the small (estimated 1983 sales $80 million) Campbell, Calif.-based microprocessor company, ran into trouble four years ago, the conventional wisdom found it easy to blame Exxon Corp. The world's largest oil company had backed and later acquired Zilog as part of its Exxon Enterprises' new business effort. Had the parent smothered the baby? Had the corporate colossus crushed the entrepreneurial spirit?

It was a good story, appealing to many people's prejudices against big companies. But it was not a true story. Reality is both more interesting and more instructive, especially these days as big companies seek an entry into new technology fields *(see p. 35)*.

Zilog, in the beginning, seemed a powerful combination of brains and money. Federico Faggin and Ralph Ungermann, two engineers from Intel Corp., got a venture capital stake of $1.5 million from Exxon Enterprises in 1975 in order to develop an 8-bit microprocessor—a computer's central processing unit on a chip. And, indeed, success was immediate.

In 1976 the one-year-old Zilog introduced the Z80 and scored a smashing market victory over Intel and Motorola. The Z80 has become the heart of numerous 8-bit personal computers, as well as Coleco's video game machines.

The success went to its head. With Exxon's money behind it, Zilog made grandiose plans to manufacture both computer systems and semiconductor components. It made moves far beyond the capabilities—or the pocketbooks—of normal startup companies, which must answer to the stock or debt markets for their capital. Zilog answered only to Exxon, which, like an indulgent parent, exercised little control in the early days.

Zilog President Franc deWeeger
"Blame yourselves, not Exxon."

Children of overly indulgent parents tend to lack discipline, and Zilog was no exception. Its pampered engineers pursued technology without regard for marketing or a business plan. Although Zilog was able to spend a phenomenal 30% of sales on research and development, much of the money was wasted. Other companies in Silicon Valley came to regard a stint at Zilog on a resume as something of a negative.

Zilog's wastrel ways soon caught up with it. By the time it brought out its next generation microprocessor, the 16-bit Z8000 in 1979, competitor Intel had been in the market over a year with its 8086 family. Not an insurmountable hurdle. But Zilog compounded the problem by being late in delivering the all-important software, without which a microprocessor is like an auto engine without plugs and points. Zilog's management presumed its previous customers would snap up its chips anyway. Not so.

So how did Zilog's entrepreneurs meet adversity? First they bickered with parent Exxon; then they left home. Ungermann left to found another company in 1979; Faggin became a vice president of Exxon Enterprises in 1980 and left in 1981 to start a new venture. Their successor didn't stay long, either.

Meanwhile the once-promising venture had become a demoralized loser. Zilog lost $12 million in 1981 and more than that last year. Alarmed and now aware that the real problem was management, Exxon went outside, hiring Franc deWeeger in May 1982. DeWeeger, 51, is a seasoned semiconductor manager with 15 years at Motorola, who also spent two years at Signetics, a small company that is part of the worldwide interests of Philips NV of the Netherlands. He began by telling the people at Zilog to grow up.

"When I joined the company," says deWeeger, "everybody was moaning and groaning about Exxon. I said, stop pointing the finger at Exxon. Point it at yourselves. Don't blame Exxon for the mismanagement of this company. That responsibility lies with the management team."

Then deWeeger purged the company of projects (many unauthorized) that had little market value and concentrated on getting Zilog a big personal computer order for the Z8000. He scored a major victory in January with Commodore, which picked Zilog's 16-bit microprocessor as the brains of its next generation of home and business computers. Last month Zilog's system division signed an $18 million contract to supply the Internal Revenue Service with computers for its local offices.

After a year on the job deWeeger, who has a degree in economics from Syracuse University, has some thoughts about silver spoons: "Who gives you the capital is irrelevant, but a traditional venture capitalist might have moved more quickly to make Zilog business-driven rather than engineer-driven." And Exxon? It has been reminded of what it should never have forgotten: that selecting the right management is just as important as developing good products—in technology as well as in oil. ■

Consumer Orientation
No. 23 in a Series
Subject: The Quest for Quiet Performance

23 Porsche 928S

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United States Patent 4,382,28
is in good company.

4,382,286 - METHOD AND APPARATUS FOR COMPRESSING AND DECOMPRESSING STRINGS OF ELECTRICAL DIGITAL DATA BITS – 5/3/83

4,382,229 – CHANNEL HOT ELECTRON MONITOR – 5/3/83

4,381,953 – POLYSILICON-BASE SELF-ALIGNED BIPOLAR TRANSISTOR PROCESS – 5/3/83

4,381,818 – POROUS FILM HEAT TRANSFER – 5/3/83

4,381,563 – APPARATUS AND METHOD FOR VISUALLY PRESENTING ANALYTICAL REPRESENTATIONS OF DIGITAL SIGNALS – 4/26/83

4,381,540 – ASYNCHRONOUS CHANNEL ERROR MECHANISM – 4/26/83

4,381,532 – CONSTANT ENERGY DRIVE CIRCUIT FOR ELECTROMAGNETIC PRINT HAMMERS – 4/26/83

4,381,502 – METHOD AND APPARATUS FOR CHARACTER GENERATION – 4/26/83

4,381,453 – SYSTEM AND METHOD FOR DEFLECTING AND FOCUSING A BROAD ION BEAM – 4/26/83

4,380,813 – ERROR CHECKING OF MUTUALLY-EXCLUSIVE CONTROL SIGNAL – 4/19/83

4,380,811 – PROGRAMMABLE LOGIC ARRAY WITH SELF CORRECTION OF FAULTS – 4/19/83

4,380,076 – APPARATUS FOR FOUR SIDE TRANSVERSE IRRADIATION OF A REGION – 4/12/83

4,380,067 – ERROR CONTROL IN A HIERARCHICAL SYSTEM – 4/12/83

4,380,063 – FLOW CONTROL MECHANISM FOR BLOCK SWITCHING NODES – 4/12/83

4,380,057 – ELECTRICALLY ALTERABLE DOUBLE DENSE MEMORY – 4/12/83

4,380,005 – DYNAMIC ZERO OFFSET COMPENSATING CIRCUIT FOR A/D CONVERTER – 4/12/83

4,379,833 – SELF-ALIGNED PHOTORESIST PROCESS – 4/12/83

4,379,832 – METHOD FOR MAKING LOW BARRIER SCHOTTKY DEVICES OF THE ELECTRON BEAM EVAPORATION OF REACTIVE METALS – 4/12/83

4,379,826 – POSITIVE ELECTRON BEAM RESISTS OF ORTHO CHLORO SUBSTITUTED PHENOL OR CRESOL CONDENSED WITH FORMALDEHYDE – 4/12/83

4,379,740 – PHOTOASSISTED GENERATION OF HYDROGEN FROM WATER – 4/12/83

4,379,727 – METHOD OF LASER ANNEALING OF SUBSURFACE ION IMPLANTED REGIONS – 4/12/83

4,379,218 – FLUXLESS ION BEAM SOLDERING PROCESS – 4/5/83

4,379,180 – METHODS FOR MAKING GRADED INDEX ANTIREFLECTIVE SURFACES – 4/5/83

4,379,022 – METHOD FOR MASKLESS CHEMICAL MACHINING – 4/5/83

4,379,005 – SEMICONDUCTOR DEVICE FABRICATION – 4/5/83

4,378,630 – PROCESS FOR FABRICATING A HIGH PERFORMANCE PNP AND NPN STRUCTURE – 4/5/83

4,378,627 – SELF-ALIGNED METAL PROCESS FOR FIELD EFFECT TRANSISTOR INTEGRATED CIRCUITS USING POLYCRYSTALLINE SILICON GATE ELECTRODES – 4/5/83

4,378,589 – UNIDIRECTIONAL LOOPED BUS MICROCOMPUTER ARCHITECTURE – 3/29/83

4,378,421 – CLEANING METHOD AND APPARATUS FOR AN ELECTROGRAPHIC SYSTEM – 3/29/83

4,378,383 – METHOD OF MAKING CONDUCTIVE PATHS THROUGH A LAMINA IN A SEMICONDUCTOR DEVICE – 3/29/83

4,377,854 – SUBSTRATE FOR MAGNETIC DOMAIN DEVICE – 3/22/83

4,377,849 – MACRO ASSEMBLER PROCESS FOR AUTOMATED CIRCUIT DESIGN – 3/22/83

4,377,845 – OPTIONAL MACHINE INHIBITION FOR FEATURE MALFUNCTION – 3/22/83

4,377,842 – FLYBACK VOLTAGE CONTROL – 3/22/83

4,377,806 – PARALLEL TO SERIAL CONVERTER – 3/22/83

4,377,803 – ALGORITHM FOR THE SEGMENTATION OF PRINTED FIXED PITCH DOCUMENTS – 3/22/83

4,377,633 – METHODS OF SIMULTANEOUS CONTACT AND METAL LITHOGRAPHY PATTERNING – 3/22/83

4,377,338 – METHOD AND APPARATUS FOR COPIER QUALITY MONITORING AND CONTROL – 3/22/83

4,376,963 – COMPOSITE MAGNETIC RECORDING DISK – 3/15/83

4,376,960 – FLEXIBLE DISK STABILIZING STRUCTURE – 3/15/83

4,376,943 – RECORD CARRIER FOR AN ELECTRO-EROSION PRINTER AND METHOD FOR MAKING SAME – 3/15/83

4,376,932 – MULTI-REGISTRATION IN CHARACTER RECOGNITION – 3/15/83

4,376,897 – LOW VOLTAGE SERIAL TO PARALLEL TO SERIAL CHARGE COUPLED DEVICE – 3/15/83

4,376,588 – BI-DIRECTIONAL SERIAL PRINTER WITH LOOK-AHEAD – 3/15/83

4,376,587 – PRINT RIBBON PROTECTION – 3/15/83

4,376,569 – ELECTROLYTE FOR AN ELECTROCHROMIC DISPLAY – 3/15/83

4,376,411 – PRINT HAMMER LIMIT CONTROL – 3/15/83

4,376,252 – BOOTSTRAPPED DRIVER CIRCUIT – 3/8/83

4,376,249 – VARIABLE AXIS ELECTRON BEAM PROJECTION SYSTEM – 3/8/83

4,376,057 – ETCHANT COMPOSITION AND USE THEREOF – 3/8/83

4,375,657 – MAGNETIC HEAD ASSEMBLY – 3/1/83

4,375,656 – MAGNETIC HEAD ASSEMBLY WITH ASYMMETRIC SLOTTED CONFIGURATION – 3/1/83

4,375,654 – FACSIMILE VECTOR DATA COMPRESSION – 3/1/83

4,375,652 – HIGH-SPEED TIME DELAY AND INTEGRATION SOLID STATE SCANNER – 3/1/83

4,375,600 – SENSE AMPLIFIER FOR INTEGRATED MEMORY ARRAY – 3/1/83

4,375,592 – INCREMENTAL ROTARY ENCODER – 3/1/83

4,375,390 – THIN FILM TECHNIQUES FOR FABRICATING NARROW TRACK FERRITE HEADS – 3/1/83

4,375,339 – ELECTRICALLY CONDUCTIVE RIBBON BREAK DETECTOR FOR PRINTERS – 3/1/83

4,375,103 – METHOD AND APPARATUS OF SIGNALLING REQUEST TO SEND CLEAR TO SEND DELAY – 2/22/83

4,375,085 – DENSE ELECTRICALLY ALTERABLE READ ONLY MEMORY – 2/22/83

4,375,079 – DIGITAL DATA DISPLAY SYSTEM – 2/22/83

4,375,072 – SELF-CALIBRATING OVERCURRENT DETECTOR – 2/22/83

4,375,062 – ASPIRATOR FOR AN INK JET PRINTER – 2/22/83

4,374,911 – PHOTO METHOD OF MAKING TRI-LEVEL DENSITY PHOTOMASK – 2/22/83

4,374,626 – ERASING TYPEWRITER WITH AUTOMATIC/MANUAL SELECTION – 2/22/83

4,374,625 – TEXT RECORDER WITH AUTOMATIC WORD ENDING – 2/22/83

4,374,618 – MICROFILM CAMERA HAVING A MOVING LENS – 2/22/83

4,374,586 – DOCUMENT FEED SHEET ALIGNER – 2/22/83

4,374,429 – INFORMATION TRANSFER SYSTEM WHEREIN BIDIRECTIONAL TRANSFER IS EFFECTED UTILIZING UNIDIRECTIONAL BUS IN CONJUNCTION WITH KEY DEPRESSION SIGNAL LINE – 2/15/83

4,374,415 – HOST CONTROL OF SUSPENSION AND RESUMPTION OF CHANNEL PROGRAM EXECUTION – 2/15/83

4,374,386 – FORCE-TEMPERATURE STABILIZATION OF AN ELECTROMAGNETIC DEVICE – 2/15/83

4,374,383 – CAPACITIVE TRANSDUCER FOR SENSING A HOME POSITION – 2/15/83

4,374,321 – AUTOMATIC TEMPERATURE CONTROLLER FOR AN ELECTRO-PHOTOGRAPHIC APPARATUS FUSER AND METHOD THEREFOR – 2/15/83

4,374,007 – TRIVALENT CHROMIUM ELECTROPLATING SOLUTION AND PROCESS – 2/15/83

4,374,001 – ELECTROLYTIC PRINTING – 2/15/83

4,373,966 – FORMING SCHOTTKY BARRIER DIODES BY DEPOSITING ALUMINUM SILICON AND COPPER OR BINARY ALLOYS THEREOF AND ALLOY-SINTERING – 2/15/83

4,373,778 – CONNECTOR IMPLEMENTED WITH FIBER OPTIC MEANS AND SITE THEREIN FOR INTEGRATED CIRCUIT CHIPS – 2/15/83

4,373,194 – FULL PAGE REPRESENTATION THROUGH DYNAMIC MODE SWITCHING – 2/8/83

4,373,183 – BUS INTERFACE UNITS SHARING A COMMON BUS USING DISTRIBUTED CONTROL FOR ALLOCATION OF THE BUS – 2/8/83

4,373,173 – MULTI-ELEMENT H ASSEMBLY – 2/8/83

4,373,166 – SCHOTTKY BARRI WITH CONTROLLED CHARACTERISTICS – 2/8/83

4,372,699 – SHEET FEEDER FO TYPEWRITERS – 2/8/83

4,372,697 – RIBBON DRIVE ARRANGEMENT FOR A PRINTER – 2/8/83

4,372,672 – SELF-TRIGGERING CONTROL SENSOR – 2/8/83

4,372,671 – SHOCK ABSORBIN CARRIAGE DRIVE COUPLING COPIER – 2/8/83

4,371,933 – BI-DIRECTIONAL D OF CIRCULAR ARCS – 2/1/83

4,371,932 – I/O CONTROLLER I TRANSFERRING DATA BETWE HOST PROCESSOR AND MULT UNITS – 2/1/83

4,371,929 – MULTIPROCESSOR WITH HIGH DENSITY MEMOR ARCHITECTURE INCLUDING PARTITIONABLE CACHE STOR INTERFACE TO SHARED DISK MEMORY – 2/1/83

4,371,902 – DISK INITIALIZATI METHOD – 2/1/83

4,371,857 – ELECTROMAGNET OPERABLE RAM ACTUATOR I PARTICULAR FOR IMPACT PRINTERS – 2/1/83

4,371,565 – PROCESS FOR ADH AN ORGANIC RESIN TO A SUB BY MEANS OF PLASMA POLY PHOSPHINES – 2/1/83

4,371,273 – ELECTROCHEMICA PRINTHEAD – 2/1/83

4,371,157 – COMPACT ENVELOP HANDLING DEVICE – 2/1/83

4,370,732 – SKEWED MATRIX A GENERATOR – 1/25/83

4,370,651 – ADVANCED PLASMA TECHNOLOGY – 1/25/83

4,370,641 – ELECTRONIC CONT SYSTEM – 1/25/83

4,370,197 – PROCESS FOR ETC CHROME – 1/25/83

4,369,501 – DUAL CYCLE DATA DETECTION SYSTEM AND ME FOR BUBBLE MEMORIES – 1/18

4,369,463 – GRAY SCALE IMAG COMPRESSION WITH CODE W FUNCTION OF IMAGE HISTORY – 1/18/83

4,369,396 – COLOR CATHODE R TUBE APPARATUS WITH SHAD MASK – 1/18/83

4,369,271 – LACQUER FOR REC CARRIERS AND PROCESS FOR PRODUCTION – 1/18/83

4,369,154 – PROCESS FOR PRO SMOOTHER CERAMIC SURFACES – 1/18/83

4,369,072 – METHOD FOR FOR IGFET DEVICES HAVING IMPR DRAIN VOLTAGE CHARACTERISTICS – 1/18/83

4,368,977 – DOCUMENT EJECT APPARATUS AND METHOD US FOR COPIERS – 1/18/83

4,368,538 – SPOT FOCUS FLAS SOURCE – 1/11/83

4,368,513 – PARTIAL ROLL MO TRANSFER FOR CYCLIC BUBB MEMORY – 1/11/83

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–TWO-SPEED
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–SUPERCONDUCT
–12/21/82

–SYSTEM FOR
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OF DATA IN A CO
PUTER COMMUNIC
–12/21/82

–CHINESE/KANJI
ITION SYSTEM–12

–PATTERN INSPE
METHOD AND
US–12/21/82

–PAPER FEED RO
Y FOR A TYPEW
–12/21/82

–SEMICONDUCT
TED CIRCUIT
NNECTIONS–12/2

–MULTI-LAYERED
ZED SILICON MA
TE–12/14/82

–V-MOS DEVICE WITH
GNED MULTIPLE
DES–12/14/82

–SIGNATURE PRESENTATION
AND APPARATUS–12/14/82

4,363,919–HETEROFULVALENE GEMINAL DITHIOLATE COMPOUNDS AND THEIR SELENIUM AND TELLURIUM ANALOGS AND A METHOD OF FABRICATING THE SAME–12/14/82

4,363,828–METHOD FOR DEPOSITING SILICON FILMS AND RELATED MATERIALS BY A GLOW DISCHARGE

4,363,549–ELECTROMECHANICALLY OPERATED FUSER ROLL CLOSURE–12/14/82

4,363,125–MEMORY READBACK CHECK METHOD AND APPARATUS–12/7/82

4,363,124–RECIRCULATING LOOP MEMORY ARRAY TESTER–12/7/82

4,363,110–NON-VOLATILE DYNAMIC RAM CELL–12/7/82

4,363,093–PROCESSOR INTERCOMMUNICATION SYSTEM–12/7/82

4,363,044–TRAY FOR MAGNETIC DISK DRIVE MACHINE–12/7/82

4,362,977–METHOD AND APPARATUS FOR CALIBRATING A ROBOT TO COMPENSATE FOR INACCURACY OF THE ROBOT–12/7/82

4,362,843–PROCESS FOR PRODUCING A POLYMERIZED, HEAT-RESISTANT LACQUER–12/7/82

4,362,798–HYDRAZONE AND PYRAZOLINE OR ACETOSOL YELLOW CONTAINING CHARGE TRANSPORT LAYER PHOTOCONDUCTOR AND ELECTROPHOTOGRAPHIC PROCESS

AND THEIR SELENIUM AND TELLURIUM ANALOGS AND A METHOD OF FABRICATING THE SAME–12/7/82

4,362,611–QUADRUPOLE R.F. SPUTTERING SYSTEM HAVING AN ANODE/CATHODE SHIELD AND A FLOATING TARGET SHIELD–12/7/82

U.S. Patent 4,382,286 was one of four issued to IBM on Tuesday, May 3. This invention reduces the time for transmitting an image from a computer's central processing unit to its display unit.

But as the latest addition to this partial list of IBM achievements in technology and science, it represents something larger: the creativity of IBM inventors.

Over the last 25 years, they've been granted more than 11,000 patents.

Their innovations and discoveries helped IBM make contributions to all aspects of the information processing industry—from typewriters to our largest computers.

For instance, our most advanced disk file transfers data at 3 million characters per second, the fastest rate available in a production unit. Our experimental 288,000-bit memory chip has the largest capacity yet reported for a chip produced on a manufacturing line. And the circuit packaging in our larger computers is the densest in the industry.

Each achievement, no matter how small (or how large), contributes to making IBM products faster, less expensive, easier to use and more reliable.

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And that's the patent truth.

IBM

Everyone wants a piece of the overnight courier business—even Purolator, the biggest competitor of all.

Attack of the invisible giant

By Jeff Blyskal

WHAT'S WRONG with this picture? Three men carrying red, blue and purple parcels are running a footrace in the desert. Suddenly, number three breaks ahead of number two. Airborne Freight, we are told, has just passed Emery in the overnight air express race. Federal Express remains number one.

Missing is a courier from Purolator—a low-profile, New Jersey-based company that may be more familiar to your auto mechanic than to your broker. Fifteen years ago it only manufactured filters for motor vehicles, but now Purolator also moves at least 50% more express delivery packages door-to-door than anyone else.

In 1982 three-fourths of Purolator's $750 million in sales and $68 million in operating profit came from courier and armored car services. Purolator's 25% return on equity just tops Federal Express'. Federal's dollar sales are bigger and have grown faster, but Purolator is working to close the gap.

Last February the company moved more aggressively into document transportation by introducing its 2-ounce PuroLetter and by transforming its Hiway Pak and Sky Pak into the 2-pound PuroPak. This is in large part the work of William Waltrip, who left Pan American for Purolator last July. At 45, he is heir apparent to 67-year-old Frederick Cook, who has been chairman since 1982. Waltrip, known as a gregarious, effective executive at Pan Am, brings a fresh competitive spirit to Purolator.

Nowhere is this more evident than in documents. As of Mar. 1, Purolator was moving 6,000 PuroLetters a night (one-seventh of Federal's letter volume) and an estimated 32,000 PuroPaks (half of Federal's similar overnight envelope volume). Outsiders expect the company's document business to double by next year.

A Purolator courier and Chief Executive William Waltrip
Why fly when you can drive?

Absolutely, positively number one

Determining who leads the overnight package delivery business can be tough, and the abundance of clever ad copy doesn't help. Federal Express is absolutely number one in 1982 revenues. But in volume of overnight packages shipped, Purolator is positively the leader.

Parent company	Overnight shipments (millions)	Courier revenues (millions)	Primary service
Purolator	52	$ 460	ground
Federal Express	38	1,000	air
United Parcel Service*	32	350	ground
US Postal Service	29	360	ground
Airborne Freight	6	170	air
Emery	5	150	air
Pittston*	5	150	air

*Estimate. *Source: Alex. Brown & Sons*

Federal, however, hardly seems shaken. After the PuroLetter came out—at an $8.75 price that even beats the U.S. Postal Service's $9.35 for Express Mail—Federal's reaction was haughty. It went ahead with a scheduled price boost on its Overnight Letter, from $11 to $12.50.

Part of the reason competitors often dismiss Purolator is that the firm's delivery network, which serves twice as many locations as Federal, is heavily dependent on vans and line-haul trucks. These, however, make Purolator the low-cost producer. Shipping via highway costs up to 60% less than by air, explains Waltrip.

Suppose you send a 2-pound PuroPak and Federal Courier-Pak from New York to Washington, D.C. Both Federal and Purolator pick up at your office. But Federal will send its package 900 miles by air that evening to its central sorting hub in hometown Memphis. From there the package wings its way overnight 700 miles more to Washington by next morning.

Purolator, on the other hand, throws its PuroPak onto an overnight truck to Washington, a 250-mile trip. It is delivered the same morning as the Courier-Pak. But for this and other Purolator deliveries under 300 miles, the charge is only $13.25. Federal Express customers pay $23.50, regardless of distance. For trips of more than 300 miles, Purolator goes the air hub route, too, to Columbus, Ohio. But it still charges a competitive $21.75. "The customer doesn't care how you move the package, as long as it gets there overnight," says Waltrip.

Purolator's image also suffers because of its roots. In 1967 Purolator, the oil filter manufacturer, bought American Courier, a privately held concern that specialized in hauling checks. From that grew Purolator's armored car operations, now second only to Brink's, a division of Pittston. By the mid-Seventies, Purolator began delivering time-sensitive commodities like blood plasma, replacement parts and computer data. It moved into overnight delivery in 1978.

Purolator's Canadian subsidiary is another reason the company often gets overlooked. It handles about a third of Waltrip's shipments—quite profitably. Canada, with its problem-plagued postal service, is an extremely lucrative market, and Purolator has few competitors there.

A similar situation exists overseas. Purolator already offers second- and third-day service to Europe and the Middle East. "It takes ten days to get a delivery to some parts of the world by postal service. There is tremendous demand for a reliable international courier," says Waltrip, "and there's only one effective operator—DHL [Worldwide Courier Express, a $50 million-a-year private company]—so there's room for competition."

Even as Purolator runs faster in the growing document market, however, the company's biggest asset may still be its dependence on a steady commodity business. "With 55% of Federal's volume coming from documents, it is vulnerable to electronic mail," explains Michael Walker of Alex. Brown & Sons. Right now Federal plans to spend $60 million to offer two-hour delivery of documents via facsimile transmission by 1984. But that brings added risk and potential competition with other electronic carriers. The machine parts, blood plasma and film for processing that make up 70% of Purolator's volume, meanwhile, aren't likely to move by satellite.

In dollar terms Purolator isn't about to knock Federal out of the box. But with Waltrip's newly aggressive stance, it will be harder for the boys from Memphis to ignore their high-volume competitor. ■

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Streetwalker

Measuring Measurex

There's nothing colder than yesterday's hot issue—and not always unjustifiably so. Consider Cupertino, Calif.'s Measurex Corp., which makes sensor-based computer systems mainly for the paper industry. As recently as 1979, Measurex sizzled. It sold for nearly $50 a share, 17 times earnings, for a total value of $180 million, based on its 3.6 million outstanding shares. But Measurex stumbled and slipped into the red last year. The stock collapsed, going all the way down to 13. Though it has since recovered to 26½, the stock still sold below book value until April, and the market capitalization is only $94 million, around half what it was four years ago. And how's the company doing? Much better. It has recently introduced a new control system aimed at reducing its dependence on the paper manufacturers. First quarter Measurex showed 20 cents a share in profits, vs. 5 cents last year. Savvy analysts are looking for $1 for the full year and at least $2 the next. Meanwhile, some smart outfits have accumulated the stock: Bessemer Securities, Wellington Management/Thorndike and partners of a prominent investment firm buying it for their own accounts. Will the cool get hot again?

Riding for a fall?

Looking for an attractive sale? Analyst Arthur L. Smith of New York's Oppenheimer & Co. suggests Houston-based Rowan Cos., recently selling at 14½, up 20% since mid-May and off the floor from as low as 7 last year. Rowan has risen, of course, on news of the $3.5 billion bid for offshore Gulf of Mexico leases. This is supposed to be big news for Rowan, which derives almost all its $400 million in revenues from the leasing of offshore drilling rigs. But Smith thinks the optimism is wildly misplaced. With nearly a quarter of the world's offshore rigs scheduled to be laid up by year-end, the new leases will absorb only a small portion of these, not enough to firm prices. Smith thinks Rowan is in the red to the tune of 35 cents a share this year and heading for $1 in red ink next year. "Were you to liquidate the company," says Smith, "the assets would fetch only 80% of book." With book value at $10 a share, he is estimating breakup value at about $8. "How," he asks, "can such a stock be worth $15 a share when it's so poorly positioned?" While Smith thinks Rowan is the most overpriced of the drilling companies he follows, he finds them all an attractive sale. His sell list includes: ODECO, Reading & Bates, Zapata, Western Co. of North America, SEDCO, Global Marine and Atwood Oceanics.

Offshore oil rig
The Gulf lease sale means peanuts.

Of Sosnoff and Sulzbergers

Nice of the Ochs Trust. This family trust, which controls the *New York Times*, recently offered the public 800,000 Class A shares in the august parent company. The price: 66⅝. Within two weeks the shares were up to 78. Had the trust waited a bit, the trust would have been nearly $10 million richer.

Meanwhile, chuckling all the way to the bank is Martin Sosnoff, a onetime journalist himself who has become a wealthy speculator and money manager. The latest surge in Times stock left Sosnoff and his clients richer by about $10 million; Sosnoff's Atalanta/Sosnoff Capital Corp. owns over 9% of the Times Class A stock. Sosnoff hasn't sold a share and says he doesn't intend to at anything like current prices. Says he: "Even in the present market the Times P/E is under 15 on operating earnings, or at the lower end of the communications group." Sosnoff may profit handsomely from owning Times stock, but he can probably forget about a seat on the board. His shares have limited voting power, as control rests firmly in the hands of Publisher Arthur (Punch) Sulzberger. Oh well, Marty, you can't have everything.

Better late than never

Remember the Dow Theory? One of its prime tenets was that you don't have a true bull market if only the Dow Jones industrial average hits new highs. You need confirmation from the Dow Jones transportation average. On that basis the bull market became official in early October when the transportation index sailed through its previous alltime high, the industrials having done so seven weeks earlier. It took the transportation index longer because it had farther to go to pass the old high. Would you have missed the bull market had you waited for the confirmation? About half of it, which is a high price to pay for a confirmation. Robert Stovall of Dean Witter Reynolds is an old follower of this and other theories, and he says: "It's not a leading indicator but a confirming one. It frequently comes late, but when it comes it's loud and clear." Maybe so, but we'd hate to wait that long in a declining market before finding out whether it was the real thing or not.

Getting rich quick

Not all of today's new multimillionaires are computer and software genuises. Take Leslie Quick Jr., 57, a former Forbes Inc. executive. He started his own discount brokerage firm nine years ago with $100,000 in cash and $125,000 in borrowed money. Quick & Reilly (Reilly has long since departed) will go public at an offering price that values the outfit at a nice round $100 million.

Now that's pretty good, running $100,000 into $100 million in less than ten years, but that's not all. When Bear, Stearns finishes with its public offering, the Quick family will still own 60% of the 6.2 million shares, and they will pocket $12 million in cash. What will the new shareholders get? A stock valued at 14 times the latest 12 months' earnings and 3.6 times book value. Quick & Reilly has done a masterful job of marketing: concentrating on services, advertising heavily and pricing its services well above those of rival discount houses but well below those of full-price brokers. By not paying interest on idle cash balances (rival Fidelity Brokerage Services does, for example), Quick & Reilly manages to earn hefty operating profits. Can it continue to do so in a highly competitive business? Will its almost total lack of diversification in the financial services market be a handicap or an asset? Time will tell.—**Thomas Jaffe**

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Charles Wohlstetter foresaw years ago that the breakup of AT&T would threaten his Continental Telephone. So he decided to make it into . . .

Another AT&T

By Subrata N. Chakravarty

THE PAYOFF HAS long seemed just around the next bend, but Charles Wohlstetter believes he now can see it clearly. "Nineteen eighty-four," he says, "is the year of rewards."

He means rewards for his 22-year-old Continental Telecom (formerly Continental Telephone), or Contel. Wohlstetter, now in his 70s, founded the company in 1961 after a brokerage career on Wall Street. Wohlstetter was a student of the Prussian military's *Kriegspiel* (literally, "war game"), requiring contingency planning for war with every potential combatant. Wohlstetter's targets were the country's 4,600 independent telephone companies. He developed detailed profiles of all of them and calculated acquisition prices for each. With his homework done, Wohlstetter sortied by airplane into the independents' territories armed with Continental Telephone stock (which sold as high as 45 times earnings), offering good prices and quick decisions to small telephone company owners who would sell. Over the next seven years Contel bought 600 telephone companies, almost one every four days.

It was a promising start for a nascent telephone empire, but the long anticipated breakup of a far more powerful empire, American Telephone & Telegraph's, spelled trouble for Contel. Wohlstetter, nothing if not a contingency planner, saw it coming as early as 1975. Contel was getting 60% of its revenues from AT&T's toll settlement payments (the subsidy from the highly profitable long-distance business to local service). Those revenues would shrink after an AT&T breakup. To offset the shrinkage, local-service rates would have to rise sharply, slowing growth. Wohlstetter decided that he must reduce Contel's dependence on the telephone business, which at the time accounted for more than 90% of Contel's revenues. With the breakup of AT&T, he saw an opportunity to create a new AT&T by diversifying through the field of telecommunications.

Contel founder Charles Wohlstetter with model Spacecom satellite ***Waiting for 1984.***

With the help of Salomon Brothers, Contel chose to acquire rather than start its own new businesses. Wohlstetter, after all, created the company through acquisition. "You can start from scratch, which is very costly and very dicey," says Wohlstetter. "Or you buy a company that has the elements and you pay a little more, but you telescope time."

As a consequence, Contel now owns Executone, which commands about 35% of the non-Bell market for small-business private phone exchanges handling between 2 and 100 lines, and 10% of the non-Bell market for private branch exchanges of between 100 and 5,000 lines. CADO Systems, acquired this year, makes small business computers. Both companies ran into trouble last year with new product introductions, but Executone's $4 million loss was more than offset by the profits from Contel Supply, a sales and distribution organization for telephone and computer equipment, and Contel Credit, a financing company. Both Executone and CADO are firmly in the black this year.

To exploit the big business and governmental telecommunications markets, Contel has two joint ventures with Fairchild Industries: American Satellite and Space Communications (Spacecom). Contel picked up its 50% interest in American Satellite, which had run up heavy losses for years, at an adjusted book value of $17 million. The satellite company sells teleconference, voice and data transmission services to big corporations, including Allstate and Lockheed, and provides facsimile transmission for the Gannett plants that print the new national daily, *USA Today*. Last year American Satellite turned profitable, earning $2 million on $44 million in revenues. The satellite firm should do far better this year. Because Wohlstetter "didn't like landlords," American Satellite, which leased from Western Union's Westar satellite system, bought 20% of that system.

Together with Fairchild, Contel also bought 50% of Western Union's Spacecom satellite system. Spacecom has a NASA contract to design and operate a data relay satellite system that will permit communications between other satellites and a single ground station. Contel and Fairchild have recently bought the rest of Western Union's interest in Spacecom for $11.5 million. Subsequently, for giving up its commercial exploitation rights to the relay system, Spacecom got $35 million from NASA (of which Western Union will keep half as part

of the buyout deal), additional NASA contracts, and elimination of any risk from possible cost overruns. The ten-year, $2 billion NASA/Western Union contract stays with Spacecom. The deal should help Spacecom win other government work.

In addition, Contel has acquired firms in directory publishing, remote processing services and computer software packaging. And its construction group designs, builds and maintains communications systems, mostly abroad. The group returned to profitability last year after two years of losses on operations. Contel Page, the leading construction subsidiary, is bidding on big contracts with both American Satellite and Spacecom.

It all makes Contel one of the few companies able to compete head-on with AT&T in communications. "We can handle just about anyone's communications needs," says James V. Napier, Contel's longtime president who became CEO last month. "We can design a network, engineer it, construct it and install it. We can design the software to make the system work. We can operate it and maintain it."

Wohlstetter sortied by airplane into the independents' territories, offering good prices and quick decisions to phone company owners who would sell. In seven years, Contel bought 600 companies—about one every four days.

But unlike its giant competitor, Contel will remain entrenched in basic telephone service. Some $3.4 billion of its assets is employed in 1,900 phone systems in 38 states serving more than 2 million customers, mainly rural. Contel will spend $2.6 billion over the next five years to modernize its exchanges, some of which still serve party-line customers. Higher telephone rates, based on the rates of return permitted by regulation rather than AT&T's toll settlements, plus new services made possible by modernization will, Napier says, finance the investment through internally generated cash and help Contel avoid adding to its already large debt.

In short, bigger profits from its newer businesses seem imminent, and the patience of Contel's shareholders may finally be rewarded, as Wohlstetter believes, next year. "We have everything in place," he says. "Now it's making the things we have work and grow." ■

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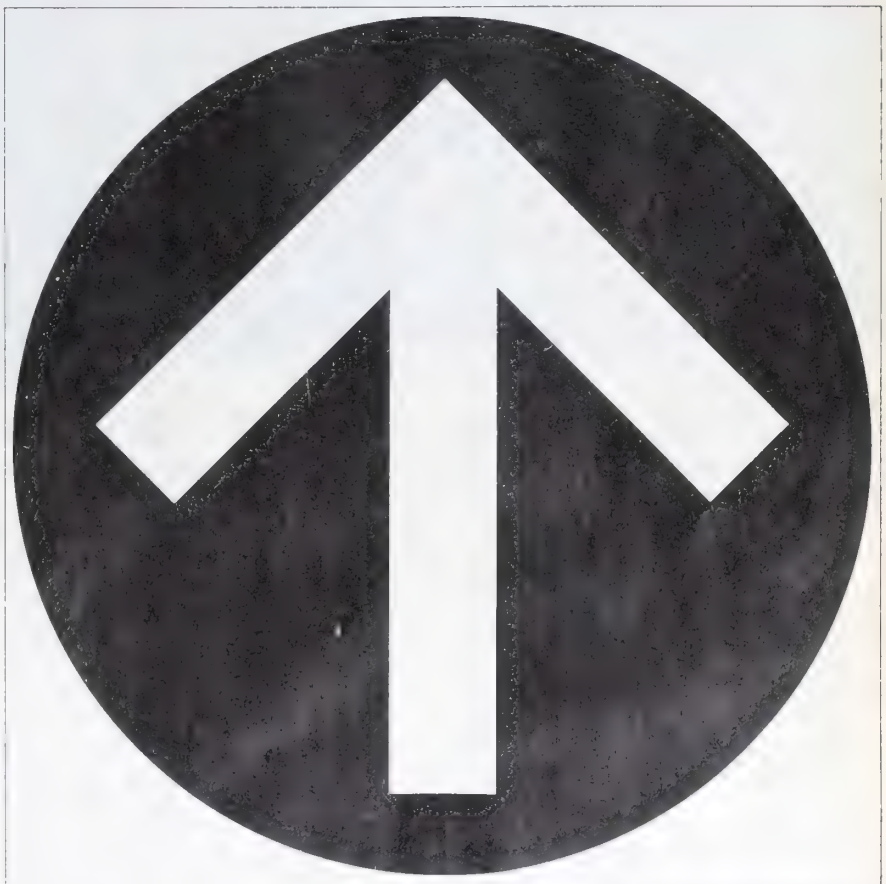
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GE and Dun & Bradstreet, smart companies both, are shedding television stations. Does that signal the decline of commercial TV? Not a chance.

Where else can you go?

By Paul B. Brown

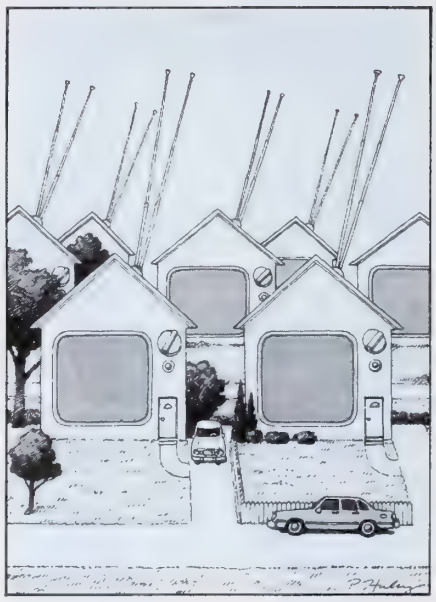
When General Electric and Dun & Bradstreet recently announced they were selling their television stations, there was a chorus of I-told-you-sos from the seers who have been predicting the demise of commercial television. Surely GE and D&B had recognized the top of the market and were selling before free TV was done in by cable and *Laverne & Shirley*. GE's and D&B's explanation that their assets could be better employed outside commercial television, skeptics said, was a typical corporate circumlocution. What was really happening was that they were selling out at the top.

Well, GE and D&B are selling at a top. However, the top is still rising. Demand for commercial TV stations, already strong, keeps getting stronger. Yet the networks' share of the TV audience has shrunk to 77% of prime-time viewers this past season, from 84% in the 1980-81 season.

"It means that cable and the independent stations are growing," says R. Joseph Fuchs, a media analyst for Kidder, Peabody. "Still, on average, more than 50% of all American households were tuned to a network television program every single night this season. If you are a national advertiser who has to reach that audience, you really don't have a hell of a lot of choice of where you are going to go."

No question: TV is an efficient medium for reaching mass consumers. Even at up to $400,000 for a 30-second spot, the cost of reaching 1,000 television viewers works out to only $3 to $8. By contrast, it can cost $10 to $20 to reach 1,000 newspaper readers. So long as such differentials exist, TV broadcasters can keep jacking up rates. Because TV stations typically sell for a price around 10 times their cash flow, higher ad rates almost necessarily mean higher station prices. And there are lots of would-be buyers out there. "How many other businesses do you know with an average pretax margin of 30%?" asks Ellen Berland Gibbs, an analyst for Goldman, Sachs. "A lot of people want in. This is a very profitable business."

So why sell at all? To a degree, tax



breaks encourage the sale of profitable TV stations. For sellers a sale offers a chance to cash in, at capital-gains tax rates, on stations' increased earnings and market value. Without selling, an owner who had owned a station for many years would have exhausted his depreciation and thus would be taxed on almost all of the rising stream of operating earnings. Why pay taxes, when you can cash in? Buyers, on the other hand, can begin depreciating the stations all over again with much larger deductions based on the stations' enhanced market value, and shelter more of the stations' earnings.

That market value has risen rapidly, according to Blackburn & Co., a leading media brokerage firm. In 1969 Capitol Broadcasting bought KKTV, the CBS affiliate in Colorado Springs, for $2.1 million. The station sold for $15.5 million last year. AVCO sold WDTN, the ABC affiliate in Dayton, to Grinnell College in 1976 for $12.9 million. In 1981 the Iowa college sold it to Hearst for $49 million.

It could be, of course, that GE and D&B simply figured prices couldn't keep inflating at such rates. D&B won't discuss its sale except for a press release that asserts "the long-term interest of D&B will be best served by redeploying these assets into the mainstream of the business services and information industry." But that only tells you D&B didn't feel comfortable in show biz; it tells you little about the internal calculations that determined the board to cash in.

Whatever they were, those calculations produced some juicy figures. The five stations for sale in Tulsa, Sacramento, Indianapolis, Ft. Wayne and Norfolk are expected to bring more than $250 million, or about 4 times what D&B paid for them. D&B bought all but the Norfolk station in 1971 for an estimated $70 million in stock. WVEC in Norfolk was added in 1980. D&B owns a sixth station, KHOU, the CBS affiliate in Houston, which it will sell later. The one station alone, in the heart of the Sunbelt, will probably sell for close to $300 million. D&B's decision to exit show business will do wonders for its already rich balance sheet.

Why is General Electric getting out? GE executive Scott S. Anderson says this: "Broadcasting for GE is a very small part of our operation." Anderson is overseeing GE's sale of two of its three TV stations and eight radio stations which together fetch GE only $100 million of its total revenues of $26.5 billion. Anderson says GE's broadcast group, only 39th in size in the country, offends GE's conviction that it should rank first or second in each of the industries in which it does business. Anderson says GE made an exception for its Denver station because of the "fantastic growth potential of the market."

GE has agreed to sell its ABC affiliate in Nashville to Knight-Ridder for $37 million and the CBS affiliate in the Albany-Schenectady-Troy region to a group of investors headed by former CBS President John D. Backe for $35 million. Both deals need FCC approval.

D&B and GE are cashing in their chips. But commercial television a declining industry? No way. ■

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Holding for takeoff

By Howard Banks

FROM ADVERSITY comes strength. Many major U.S. companies, as we know, have used the long recession to work themselves into lean, competitive shape. They are now poised for a surge of profitability on almost any solid increase in sales. But perhaps no major company is as poised as Boeing Co., the world's premier airplane manufacturer.

The pride of Seattle has developed and launched two new airliners, the 767 and 757, in the last four years. It has poured $2.5 billion into new machinery and buildings, including $500 million on computers and computer-controlled manufacturing. And it has diversified its military business, so that losing one contract is only painful and not a disaster. Yet at the end of all that, in a witheringly poor period for airplane sales, Boeing is holding nearly $300 million in cash and has only $315 million in long-term debt, against $2.7 billion in equity.

The $3 billion revolving credit line, which Chairman T. A. Wilson arranged in anticipation of the enormous cash demands of simultaneously launching the 757 and 767, is barely touched and has been cut to $2.5 billion. The first major use of this credit line is now expected this fall. And earnings, which fell 23% last year, to $364 million—$3.02 a share—are turning up in 1983. First-quarter earnings were up 47.6% on a 30% rise in sales. Wolfgang Demisch, First Boston's highly regarded aerospace expert, sees the company earning at least $3.60 a share this year on revenues of close to $11 billion.

Deliveries of the 767 and 757 have now begun, so payments are coming in. With the research and development costs expensed, as is conservative Boeing's custom, there will be no surprises in the accounts. More important, there was no cost overrun or lateness on either program, for which contingencies were built into the financial forecasts. In fact, both aircraft

Boeing Chairman Thornton Arnold (Tee) Wilson at the controls of a 767
Poised for takeoff, but piloting the company "as if we thought recession would last indefinitely."

came out with performance figures ahead of the minimum guarantees offered to the airlines. This is the first time that has happened since the highly successful 727 model was launched 23 years ago.

The stock market seems confident. Boeing's recent price of 40¾ is not far off its historic high of 45⅞ (in the record earnings year 1980). Nor is it that far below 50, a price level that several times has brought on a stock split.

But Tee Wilson, as he is universally known (the T.A. stands for Thornton Arnold), shies like a racehorse at the mention of such optimism. "We have chosen to conduct our affairs as if we thought that the recession would last indefinitely," says Wilson.

Boeing's customers, of course, don't have to pretend. The airlines have been losing their collective shirt. U.S. airlines made a record operating loss in the first quarter of 1983, while international airlines made a collective loss of some $2 billion last year. New plane orders are at a low point. One less-than-happy reason behind Boeing's reduced need for cash is that the need to finance inventory is also way down. "That's a help we would just as soon not have had," says Wilson with a wry laugh. Boeing sold 105 airliners in 1982, down from 224 the previous year and well below 1981's peak of 361.

Inhibiting a recovery of orders is the large number—perhaps 500—of secondhand jets overhanging the market. Fuel prices are down, so there is less pressure to buy new, more efficient aircraft. Giveaways are an accepted part of selling to U.S. airlines. The deal that American Airlines and TWA had wrung from hard-pressed McDonnell Douglas (FORBES, *Dec. 21, 1982*) forced Boeing to do the same sort of thing for Delta, one of the few U.S. majors that *easily* could have afforded to buy its planes. "The opportunity presented itself to us, and we took it," says Bob Openlander, Delta's finance vice president, with understandable delight.

Yet even in the stricken airline business, there are signs of spring. Passenger traffic for U.S. airlines increased almost 10% in the first four months of 1983. Traffic equals profits in this highly leveraged business. "Each 1% increase in traffic is $350 million a year extra revenue" for the U.S. system, points out the Air Transport Association's George James. And history shows that once the airlines record four consecutive profitable quarters, they start spending on new equipment. The international airlines, which Wilson expects to account for almost 60% of future commercial sales, will order new equipment if traffic is growing. They will get money from their governments or, more often, subsidized export credit finance. The Reagan Administration has given the U.S. Export-Import Bank (Boeing's Bank, as it is called) more to lend, now that interest rates are down.

Is it foolish for the airlines to rush to spend recovering profits after accumulating three years of red ink? In the comfortable days of regulated competition, perhaps not. But in today's competitive, deregulated environment, having the latest and most efficient equipment is a necessity. The new airliners, Boeing's 767 and 757 and the European Airbus A310, offer an edge, even though they do not yield the great productivity improvements of past innovations: jets for piston engines in the 1950s or wide-body aircraft, beginning with Boeing's 747 in 1970. The productivity increase of a Boeing 757 over a 727 *(see box, p. 54)* is on the order of 15% to 20%, depending on routes. But when a rival has that edge over the equipment you are using, in a head-on contest for passengers the pressure to buy is immense.

The new order buildup is expected to begin after a major airline takes the 757. That would block off a large part of Boeing's immediately available production from the middle of 1984 on. Other airlines would feel some pressure not to be shut out. Candidates to start such a rush: American, which is leaning toward ordering more 767s; Northwest, which needs around 50 narrow-body types to replace 727s.

The business won't fall into Boeing's lap. Northwest is expected to order 757s but will use the possibility of buying McDonnell Douglas' older-design DC-9-80 to extract better terms from Boeing. And the Seattle plane builder faces a price war on the 767, which competes directly with the Airbus. The Europeans cannot take workers on and lay them off as can an American company, so Airbus Industrie keeps producing white-tails (aircraft without orders) and slashes prices to get rid of them. In the recent Airbus deal with Thai International, the price for two A310s was cut to around $40 million each (the 767's standard price is $46 million to $52 million).

A price war has serious implications for Boeing's future profits, but the company is not without resources. It has a genuine family of airliners in each major segment of the market.

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After all the years of loud ties, wouldn't dad quietly welcome a change of pace?

John Jameson
Imported Irish Whiskey

Microcomputers Facing the realit

Microcomputers are finding their way into millions of homes and businesses. But corporate treasurers may wonder if "micros" can handle complex financial tasks. What are the real capabilities of this new technology, and what are the costs?

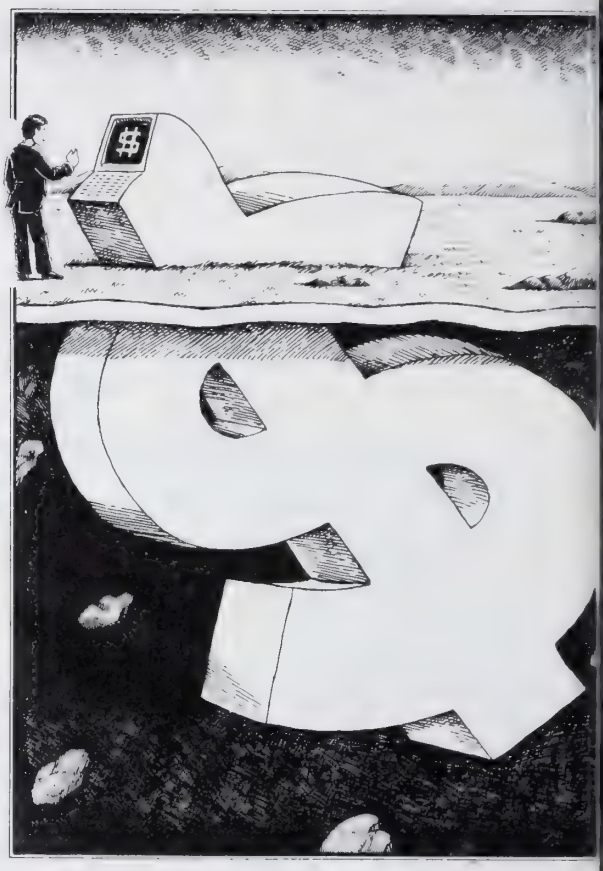
The microcomputer is an appealing notion: a desktop box that promises to give a single executive the abilities of an entire department. Proponents of micros say they offer fingertip access to financial information, relief from rising time-sharing costs, and quick solutions to complex calculations.

Attracted by these possibilities, many financial officers are considering whether—and how—to acquire micros. But they often find that the reality of a micro falls short of the promise. Complex calculations? Yes, if the software fits the company's needs. Instant access? Yes, if the larger computers that store information are equipped to communicate with micros. Relief from time-sharing costs? Yes, but not as much as expected.

There's no question that micros are a potentially powerful tool for financial management. But much of their potential remains unfulfilled. Executives need a clear understanding of what micros can and cannot accomplish.

The hidden commitment

Microcomputers are relatively cheap. But the financial officer examining the cost of micros needs to look far beyond the machines themselves. Computer hardware is useless without the software, or programs, that drive it. Separate software is needed for each treasury task, from investment and debt monitoring to cash position reporting, forecasting, and keeping track of banking relationships.



Banks and other suppliers can provide standar programs for some functions. An account autho module can help companies keep track of who l signing authority on different accounts. An aut dial module allows the micro to gather informa from various banks' computers.

Many programs, however, can't simply be bough the shelf and used as they are. Long-range fore ing, for instance, must be tailored to each comp assumptions and strategies. In addition, these grams must be modified as often as assumptior and strategies change.

The result is that a company's commitment to micros must be matched by a commitment to so ware. Financial staff should be trained, or hire write at least some of their own programs. Late

t software will be far easier to modify than stan-
d program modules or those developed by outside
sultants. By becoming "computer literate," a
ance department will get the most from its invest-
nt in micros.

e limits of micros

ile micros have come a long way in the last few
rs, there's still much they can't do. Most micros
limited in the protocols and speed with which
y communicate with other computers. A typical
ance department, with numerous banking rela-
nships, may find it difficult to keep information
rent on a micro.

day's micros also are limited in their storage
pacity. The latest "rigid disk" models have im-
oved capacity, but still may not be able to receive
t information quickly enough. It could take hours
receive information that changes by the minute.

hen the time comes to use the information that's
en stored, micros reveal another shortcoming.
eir slower speed, coupled with limited internal
ed memory, may severely limit the complexity
he problems they can solve.

realistic approach

hat, then, can financial officers realistically
pect from a microcomputer? The key here lies in
derstanding and working within its limitations.
nked with the more capable computers at a bank,
cros can perform a wide range of auxiliary tasks.

any large banks have mainframe computers that
n function and communicate at tremendous speed,
re huge amounts of information, and integrate
at data into a consistent format. These machines
n provide real-time information that is updated
stantly as transactions occur.

ther than trying to use a micro to keep their
ta current, financial officers can leave that task
their bank. Then, using their micros, they can
rieve whatever information they need and
anipulate that information to make it useful.

Before long, of course, microcomputers will be able to do far more than they can today. Does this mean that today's investment in micros will be wasted? No, because the investment is for so much more than just hardware and software. When tomorrow's more advanced models come along, the companies already accustomed to micros will be better prepared to use them.

Today's micros can already pay for themselves, often in a matter of months, simply by replacing some manual functions and speeding up clerical work flow. But their ultimate value will be much greater. By adding their vast computational power to the financial executive's judgment and experience, micros will help set new standards of speed and efficiency in financial decision-making.

At Mellon Bank, we pioneered computerized banking services for business. Today we remain a recognized leader in data processing and information delivery. Our commitment to the latest technology has led us to build one of the finest telecommunications networks of any bank—consisting of over 11,000 on-line terminals worldwide, and handling over 25 million transactions per month. It's one more way in which Mellon provides premier financial services to corporate clients.

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Mellon Bank

One of the banks that define banking

For more information on this subject, write the Communications Office, Mellon Bank, Mellon Square, Pittsburgh, PA 15230.

And if Airbus does get European governments to fund a new type—in the 150-seat class, the A320—then Boeing is ready to come out with either a new version of the 737 or even a brand-new design. But Boeing does not expect to have to do that until an all-new design is available, around 1988.

Boeing is also the lowest-cost producer in the airliner business. This has little effect against government-funded competitors for a time, but eventually even taxpayers get fed up building white-tails to be parked at aircraft factories.

Most of all, Boeing has management capability. Both the 757 and 767 came in weighing *less* than originally planned, an achievement almost without precedent in the business. The ability to do that does not come from machines but from a management that ignores departmentalization. E.H. (Tex) Bouillion, now a corporate senior vice president and still one of Boeing's leading plane salesmen, describes it as a nonstructured system. He points to Dean Thornton, who was chief financial officer for the Boeing Commercial Airplane Co. division, but who is now in charge of production on the 767.

Boeing takes its manufacturing skills seriously. It has put the know-how of the company's jig and tool designers—average age 58—into a CAD/CAM program so that new generations, designing at computer screens, will understand the lessons of old-fashioned scale modeling.

Boeing takes research seriously, spending 7.6% of sales on R&D. Currently it is working on an item for future electronic cockpits that will allow a pilot to call out the word "Airports," then "O'Hare," and the approach map for Chicago's airport will appear on a screen. And it takes marketing seriously, encouraging Boeing people at all levels—not merely the highest level where Tee Wilson talks to Dave Garret of Delta and Tex Bouillion calls on Ed Meyer of TWA—to deal directly with friends in the airlines.

Boeing's recent investments in manufacturing efficiency have helped its military business (20% of revenues), too. There is now a $5 billion-plus backlog of government orders, up from $4 billion at the end of 1981. That good showing is enough to allow Boeing Aerospace President Henry (Bud) Haberler to say, "We are the shining light in the Boeing company right now." But military, even in bad times for airlines, pales beside the $13.5 billion commercial backlog.

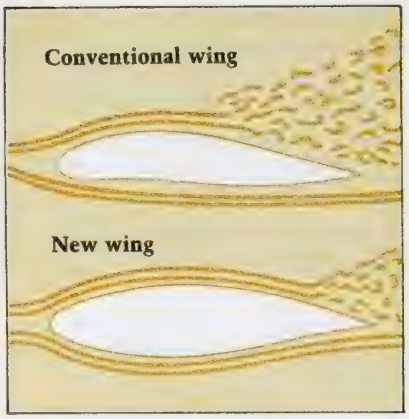
How dominant is Boeing in commercial airliners? The company has manufactured no less than 58% of all jet airliners ever made outside the Soviet Union, including all the European types, as well as those from McDonnell, Lockheed, Convair and the like. Clearly, Boeing intends to keep things that way. Its forecasts suggest there will be over 4,400 new airliners sold between 1983 and 1993, with 43% of them longer-haul types. Boeing calculates that their sales value will total $167 billion (at 1983 prices). Assuming that Boeing maintains its market share of 58% in the commercial business, that averages about $7.5 billion a year for the next 13 years.

Not too shabby an outlook, for all of Boeing's current public caution: The company's peak commercial sales, in 1980, came to $7.7 billion. ■

Why fat wings fly better

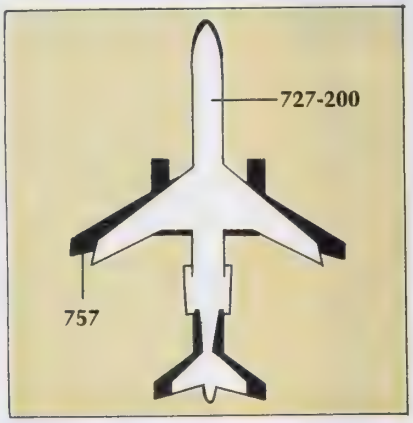
A Boeing 757 carries up to 186 passengers on 15% less fuel than a 143-seat Boeing 727. That should not be any surprise. The 727's technology is now 23 years old. The improvements come from the combined effect of developments in four areas: materials (a 3% to 4% substitution of metal with reinforced plastic or glass fibers), electronics (computer systems to control fuel-burn precisely), engines (greater fuel efficiency) and aerodynamics.

The nontechnical reader will understand the first three categories—they have already improved the family car. But what is this aerodynamics? The answer is in the wings. They may not look much different, but the latest airliners (the 767 and 757 as well as the European Airbus A310 model) have vastly different wing designs as far as the air's passing over them is concerned.



All wings generate lift because of the way they are curved both on top and below. At some point, as the air passes toward the back of the wing, it no longer flows in streamlines but breaks away in eddies. These cause aerodynamic drag; the higher the drag level, the less efficient the aircraft. Persuade the air to stick to the wing longer, and up goes efficiency.

That is just what the new, fatter wings achieve *(see left)*. Less drag equals either higher speed for the same amount of fuel burned or, at the same speed, a combination of more payload carried further on less fuel. Less drag also means that the wing can be swept back less for any given speed *(see above)*. Besides being a more efficient fuel tank, a fatter, less-swept wing is easier to design so that it is stiff enough to withstand flight loads, which translates into increased payload or range.



Developing new wing designs, to say nothing of experimenting with engines, materials and electronics, costs lots of money, of course—more than $1 billion on a new engine and around $1.3 billion for the 767. And that's only on research and development. There is about that much again spent getting the new airliners into production. That is why a new 767 costs $46 million to $52 million, depending on options, and a 757 around $10 million less, while the older 727 (the last passenger-service model—production number 1,817—was delivered to U.S. Air in April) typically cost just $20 million.—**H.B.**

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You're about to learn something our competitors would rather you didn't know:

The most advanced "mainframe" business ›mputer—the one to buy if you're really looking to ›ost your company's productivity—actually costs ss than its nearest rival.

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But they only hint at what our success has meant for *you*...even if your company doesn't use our equipment.

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the amdahl phenomenon

October, 1970, a company was formed expressly to build one product: A main-me computer that would outperform the mainframe that owned the market hat time. Today, this company is an international success story, a phenomenon.

The all-new 1984 Ford Tempo

Style and technology in total harmony.

Available in 2-door (above) and 4-door (at right)

Form follows function.

In its creation of Tempo, Ford set out to design a car that would prove that a spacious interior, comfort and performance could be compatible with fuel efficiency.

Ford engineers began with a sound design principle: Form follows function.

First came completely new functional ideas.

And then Tempo's pleasing form followed–naturally.

Designed by a world leader in aerodynamics.

Ford is an acknowledged world leader in aerodynamic design.

And Ford's aerodynamic expertise is well expressed in the '84 Tempo.

Aerodynamic design can have a profound effect on the performance of any car.

No more than six horsepower is needed for Tempo to overcome air resistance at 50 mph.

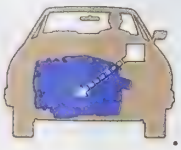
This results in less fuel consumed.

And impressive fuel economy figures are not the only result. The airflow is directed to reduce lift for improved stability and directional control.

The world's most advanced automotive computer.

If you've ever had your car's engine buck and stall on a cold morning...or choke up on a hot day...or had *any* irregular power output due to weather, temperature or altitude–you'll appreciate the capabilities of Tempo's new EEC-IV computer.

COMPUTER FUNCTIONS



- Pedal Position
- Fuel Air Mixture
- Spark Advance
- Intake-Air Temp.
- Engine Speed
- Crankshaft Position
- Engine Coolant Temp.
- Amount of O_2 in Exhaust Gas

EEC-IV (Electronic Engine Control) monitors and controls engine operation *precisely* and *instantly* under *any* conditions for optimum power output and fuel efficiency.

New Powertrain.

Developed specifically for Tempo, the 2300 HSC (High Swirl Combustion) four-cylinder engine works in concert with the EEC-IV computer.

This high-compression (9-to-1) engine generates 84 horsepower at 4400 rpm.† There's a surprisingly quick power response to even slight throttle pressure.

Available with 4-speed, 5-speed or automatic transaxles.

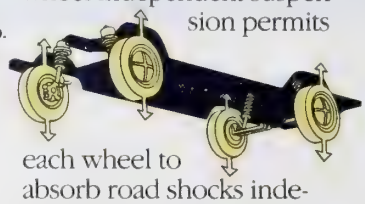
High mileage.*

Although EPA mileage ratings were not available at the time of publication, Ford Engineering tests project 42 estimated highway and 28 estimated mpg.*

Ride and handling.

Tempo's front-wheel-drive design not only delivers added tire-to-road traction, but provides precise handling and tight cornering.

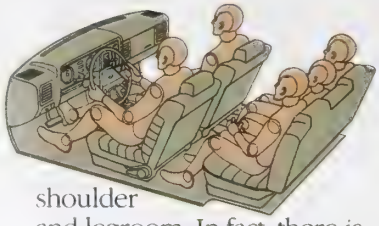
Tempo's new-design 4-wheel independent suspension permits



each wheel to absorb road shocks independently. This results in better handling and a smooth, quiet ride.

Computer refined interior.

Computer technology and designer ingenuity have joined forces to ensure the best use of Tempo's interior space. Its five-seat configuration allows for a comfortable combination of head,



shoulder and legroom. In fact, there is more rear passenger room than a Mercedes 300D.

Quality is Job 1.

An example of Ford's commitment to quality is the closeness and unifo ity of the body panel fit

You can compare Tempo's stringent stand to those set by any European Sports Sedan

What's under Tempo glistening paint?

Three more full coat tough acrylic enamel ar two coats of primer.

That's almost 10 pour of protection.

The final result: a tou brilliant finish that is hi resistant to weather, chi ping, cracking and peel

Pick up the Tempo of your life.

To obtain a brochure with more information Ford's all-new sedan, se your Ford Dealer or cal 1-800-772-2100.

†Based on SAE standard J1349

*The above estimates are proje Ford ratings based on Ford Engineering test data, and are expected to be very close to c EPA ratings. Use for comparis Your mileage may differ depe on speed, distance and weath Actual highway mileage and California ratings will probabl lower. See your Ford Dealer f copy of the Gas Mileage Guid when available.

Get it together–Buckle u

Have you driven a Ford ...lately?

Ford

Carolina Freight has overcome deregulation and the recession. Now it's ready to take on the big boys.

Carolina Pacific?

Ken Younger and John Fraley of Carolina Freight
The computer is back in the office, saving lots of money.

By Aaron Bernstein

TRUCKING COMPANIES have hit a bumpy road in the last few years. Deregulation, cut-rate competition, recession. The result has been a relentless shakeout. Of the top 100 carriers, 45 lost money in 1982. Several have gone bankrupt.

As in most such upheavals, there are companies that not only make money but also thrive. Take Carolina Freight Corp., a regional carrier (sales, $276 million) based in Cherryville, N.C. The corporate secrets: good management and a strong sense of where the company is going.

Though Carolina's earnings did dip in 1981 because of the recession, it had record earnings and sales last year. Over the past five years, earnings per share grew at a steady 16% annually and return on equity averaged 17%.

Back in the recession of 1974, when Carolina lost money as tonnage fell, CEO John Fraley Sr. saw that Carolina could do better by shifting away from the full-truckload to the less-than-truckload (LTL) end of the business. These shipments, defined as anything under 10,000 pounds, are usually many small shipments, to and from different places, bundled together into one trailer. Because LTL is far more labor-intensive, it commands higher prices than the traditional truckload. And the large capital investment in terminals needed to enter LTL in a big way helps discourage competition.

Here, says Fraley, was opportunity.

A key move: He hired expertise. Soon, in as president came Ken Younger, who had been at Roadway Express, the nation's largest trucker (FORBES, *Aug. 31, 1981*). It had been big in LTL for years.

LTL requires an efficient network of "breakpoint" and relay terminals, where shipments can be sorted and sent to proper destinations with a minimum number of changes from truck to truck. But Younger and Fraley carefully spaced their breakpoints close enough together so one driver could make the trip between two in one day. This let them cut their sleepers, where two drivers take turns on long hauls, from 40% of Carolina's fleet in 1978 to less than 10% today. That kept both labor and truck costs down.

Fraley found other ways to try to improve efficiency. He was one of the first to cut horsepower and rpms on his tractors to gear them to the 55 mph speed limit. With tractors that typically will not now go faster than 60 mph flat out, Carolina increased average miles per gallon nearly 20% since 1978, to 5.7 mpg.

Carolina was one of the first to computerize, routing 200,000 shipments a month down 10,000 carefully prescribed routes. The computer does the billing and lets the company reassure a customer about where his shipment is at any moment and when it will arrive. The company saves some $500,000 a year by reducing misrouting. And so on.

Carolina even uses the computer to tell each truck where on the loading bay it should come in, so it will be strategically placed to relay each portion of a shipment to the appropriate trailer.

The result is a network that can handle LTL, according to Fraley, "as quick or quicker than others," at competitive rates. Carolina steadily picked up market share. As a percentage of general commodities revenues, LTL moved from 66% in 1978 to 82% last year. Carolina managed an average 17% increase in revenue per ton each year, which kept earnings growing even when tonnage shrank.

Because of the efficiencies Fraley and Younger have achieved, Carolina's operating ratio has inched downward, while the industry's has crept up: In 1982 Carolina's expenses were 95.5% of revenues, while the industry ratio had jumped to over 100%.

Carolina's ability to weather the hard times has not gone unnoticed in the stock market. Its shares, as low as 10¼ last year, were recently at 50. A recent stock split and the February offering of 400,000 shares will help fill out the thin market for the stock, which has kept institutional involvement down to about 13%.

The question, though, is whether Carolina can break into the ranks of the national carriers.

Fraley's new intermodal operation, which opened last year, ships trailers by rail to Texas, California and Arizona, where delivery is done by regional carriers. But that means Carolina loses control of the shipment once it leaves its carefully built-up LTL delivery system east of the Mississippi. Eventually, Carolina will have to build a similarly tight network in the West in order to go national.

Fraley can use both approaches. Intermodal, he notes, needs no new terminals and doesn't take much capital. So it leaves him free to spend Carolina's cash flow on new terminals, either filling in east of the Mississippi or expanding westward, step by step. "We are not going to overextend or rush out and create a lot more debt. We are in a position to move where we want." Clearly, Carolina still knows where it is going. ■

Paige Rense.
Her magazines say a great deal about her.
Her watch speaks for itself.

The magazines she heads are as varied a combination as you'll find under one editor in chief: *Architectural Digest, Bon Appetit, GEO*. Yet people in publishing say that the "Paige Rense stamp" is unmistakable on each of them. And that's meant success.

After she assumed its editorship, *Architectural Digest* won the prestigious National Magazine Award for Visual Excellence. She added warmth and style to the recipes in *Bon Appetit* and made it the best-selling epicurean publication in the country. And although her appointment to *GEO* is too recent to draw any conclusions, the changes she's made thus far show she's well on her way to another triumph.

She laughs. "'The Paige Rense stamp?' Yes, I suppose there is a lot of me in my magazines. I guess that's because I love what I do. The subject matter is fascinating. But you don't produce good magazines without first having good people. And I believe the people I work with are the best in the business.

"Personally, I have only one rule for good editing: I put myself in the reader's place. And our readers have very high standards. So if I'm hard on my people, if I'm hard on myself, it's because I know how demanding our readers can be. I have to assume they're going to read every single word, and if I don't keep my standards equally high, I'm not doing my job."

High standards. You'll find them in the magazines she edits. And in the watch she wears. The Rolex Lady-Datejust Perpetual Chronometer in hand-crafted 18kt. gold.

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What happens when a maverick entrepreneur sells out to a professionally run conglomerate? Stan Peschel did, and he says:

"It's no more fun"

By William Baldwin

STANLEY PESCHEL NEEDS to be his own boss. As a boy he ran his own poultry business and announced to the world that he was going to be a millionaire. As a design engineer in his father's small electrical-products firm, he left in a huff one Christmas Eve two decades ago to open a competing business. He called it Hipotronics because it made high-potential, or high-voltage, test equipment, and to suggest high growth potential. Which was fulfilled: In its fiscal year ended last November, Hipotronics, in Brewster, N.Y., netted $2.5 million on sales of $17.6 million. Here, then, is the classic entrepreneur.

So what becomes of Hipotronics now that Peschel, 52, is a mere employee? Last July Peschel sold his and his family's 43% stake in the company to a Monaco-based conglomerate, Thyssen-Bornemisza, for $15 million. Thyssen installed one of its executives in the president's chair. Peschel stayed on as the not very active chairman. Public shareholders who waited patiently for a tender for their own stock got instead a rude shock. With uncanny, although probably coincidental timing, new orders for Hipotronics' costly capital goods ground to a halt last summer. The recession then belatedly showed up in Hipotronics' fiscal 1983 first quarter. Sales shrank by 41%, to $2.6 million, for a $99,000 loss.

Stanley Peschel with 600,000-volt transformer bound for Japan

"For a boy who saw his chickens starve, $15 million is not bad."

An optimistic view is that the change in control will give Peschel more time to do what he does best: concocting his bizarre-looking towers of steel, aluminum and copper that are used to test electric cable. Peschel, after all, professes not to be very interested in the business end of a business. "I would be president only one day a month when I got bored and when I didn't have anything to design," he recalls. He apologizes for his unloading: "For a poor boy that saw his chickens starve, $15 million is not too bad."

Every startup company, perhaps every entrepreneur, reaches a midlife crisis like this one. Some make the transition to the big time, and others peter out. Says Rudolph Morin, the Harvard M.B.A. from Thyssen who has been running the company since last summer: "You reach a point in a company's growth where unless you provide some structure you are going to limit its horizons."

Peschel dislikes structure. He dislikes business plans. He dislikes personnel departments, M.B.A.s and lawyers. Once Peschel hired a Ph.D. as head of research. The Ph.D. lasted only a year. Peschel's explanation: "Ph.D.s don't fit in in this company." The people who do fit in are engineers like Peschel: tinkerers who are self-sufficient. Peschel landed one of his earliest contracts, for an ingenious device that tests wire insulation at high speeds, after constructing a prototype from coat hangers. He often made do with reject parts from electronics suppliers. He did some of the bulldozing himself for Hipotronics' factory site on a hilltop 50 miles north of Manhattan.

That scrappy style worked well, most of the time. In its first year the company—consisting of Peschel and one employee in a rented building that had been a chicken coop—netted $782 on sales of $46,000. Every year from 1965 to 1968 profits doubled, reaching $208,000 on sales of $1.9 million. Peschel took Hipotronics public in the ebullient new-issues market of 1969. Since then shares have risen fourfold, but not without some jolts along the way.

Chemical on Bank-to-Client Communications:

There are so many claims in Cash Management, you have to question whether they are innovations for their own sake, or for yours. At Chemical, we don't call it news unless we can really improve the way we and our customers communicate with each other. That kind of commitment is Chemical's tradition. It's made us the brains in the business.

Today, our Financial Services Division offers corporations a remarkable cash management system. DirectLink.℠ Bypassing manual operations and terminal printouts, our DirectLink service lets your computers retrieve detailed balance and transaction information at high speed,

directly from our data base. This gives you enormous flexibility and introduces electronic accounting.

Highly innovative? Unquestionably. But, it's a logical extension of Chemical's pioneer services, ChemLink® and Data Exchange. And these will continue to set the standards for thousands of corporations and banks, all over the world.

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"My earnings went to hell after I went public," Peschel says unemotionally. Of customers for his test equipment, he says, "I had equipped everybody. They didn't need to buy two." So Peschel fired one-fourth of his 156 employees, beginning with the personnel manager, and then went back to his drawing board. After losses in 1970 and 1971 the company recovered quickly.

Peschel's devices range up to $1 million in price, 100 feet in height, 2.2 million volts in potential. It's a curious product line, appealing to people such as electric utility engineers who need to test buried 69,000-volt transmission lines. The factory is a Frankensteinian-voltage clutter of 6-ton power packs, a corona detector, a lightning generator, giant metal rings and, in a corner, a morgue of half-finished inventions that Peschel got bored with. On workbenches, wire terminals fill coffee cups.

Advanced technology? Yes and no. Hipotronics uses a few solid-state parts, but silicon has to compete here. Peschel's gear relies as much on cotton twine, wooden sticks and castor oil. Precisely because this is a custom-design, ad hoc business, it has been sheltered from competition from the likes of Hitachi. Japan accounted for 15% of sales last year. Peschel points to a machine he developed for locating bad spots in telephone cable. "The Japanese aren't going to build them because we sell only 30 to 50 a year," he says. "We get $4,000 for it. I'll bet it doesn't cost $400 to build."

Little mass production has intruded in Peschel's factory. That could change, however. Peschel's latest and cleverest invention is a variable transformer that has applications far more widespread than his testing equipment. As in many of his contraptions, mechanical design is a key element. (Peschel says his education was not so much from the electrical engineering degree he got from Union College in Schenectady, N.Y. as from the machine shop where he worked to pay tuition.) The heart of Peschel's transformer lies in its wire coil, wound in such a way that its high spots, which make electrical contact, form a geometric pattern that cuts heat loss. Often superior to solid-state alternatives, the Peschel transformer has a market in such diverse places as computer installations, skyscrapers, television stations, glass works and cheese factories. Morin says sales of this item may someday be as big as the rest of Hipotronics is today.

But to achieve volume production and marketing, Hipotronics sooner or later would have had to outgrow Peschel's disheveled individualism, and it has done so. Has the entrepreneurial spirit dissipated? Peschel used to let employees set their own overtime. Morin has imposed tight controls. "The biggest complaint of the employees now is it's no more fun," Peschel says. He's talking about himself, too. He spends a lot of time these days playing with bulldozers on a mountaintop retreat he owns in upstate New York, and comes to the office three days a week. Morin's professional management may be just what Hipotronics needs to achieve its potential. But for better or worse, the company will never be the same. ■

The Up & Comers

It's not so much building a better mousetrap as how you go about financing it.

"I don't want the dog in the picture"

By Paul B. Brown

If only a tiny fraction of the world's 70 million owners of 35mm cameras would spring cash for a gadget to make their own prints at home without a darkroom, somebody could make a fortune.

And why shouldn't that somebody be Harold Dreyfus? That's the way Harold Dreyfus saw it, at least. He came up with the desired device, but what's even more interesting is the way he has financed and marketed it. Put simply: He has done so at minimum risk to Harold Dreyfus.

Dreyfus, formerly a marketing consultant for photography companies,

Daylab President Harold Dreyfus
How many prints of Yellowstone National Park do you need?

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Another reason the world is sold on Bell.

did spend $200,000 to retain a company to build a prototype of his Daylab color enlarger-printer. Nineteen inches high, it combines a high-resolution lens with a light-tight compartment in which prints are developed. At that point, Dreyfus says, he could have taken the "usual approach: raise some money, build a factory, hire a marketing manager and a group of salesmen. To do that you would need $10 million to $15 million. This is the wrong way for an entrepreneur to go into business."

With a working model, Dreyfus, who established Daylab in Santa Monica, Calif., persuaded six investors to commit only $1 million in return for 40% of his company. He then used his professional contacts to help work a deal with Vivitar, the big photographic marketer, to sell and distribute the Daylab in the U.S. Finally, with his upfront cash and his deal with Vivitar, he had little trouble placing an initial production order for 25,000 Daylabs with Phase One, a photographic equipment manufacturer. In those arrangements Dreyfus not only minimized his direct financial risk but also, by relying on established organizations for manufacturing and marketing, minimized his risk of going astray in those areas. Dreyfus thinks more entrepreneurs could start businesses that way, but, he says, "Most entrepreneurs don't have enough business sense to recognize this."

While he has reduced the risks, Dreyfus is still faced with one huge unknown. Are there enough camera buffs interested in spending about $250 to make prints of their pictures? After all, how many prints of Yellowstone National Park or the world's cutest baby does anybody need?

"Is it something that is truly needed? Absolutely not," says Dreyfus. "You need food and drink. You don't need a Daylab. But we aren't talking need. We are talking about something people want. This device makes printing pictures fun. Until now everyone has concentrated on the taking of the pictures. We are going to make the picture-making fun."

And the camera market is still growing. In 1972 shipments of 35mm cameras numbered 821,000. In 1982 shipments hit 3.7 million. Dreyfus says he will do just fine if he sells only 50,000 Daylabs a year. The first devices will come off the production line this summer.

Dreyfus sees the Daylab's capability for cropping prints to the user's taste as exceedingly important to sales, and he waxes philosophic on the subject. "One of the biggest problems everyone is facing today is a lack of control of their life," he asserts. "It's not only government, but utilities who raise their rates without asking you, and the companies you work for. I think that is part of the success of the personal computer. It gives you control of quantifiable things that you never had before. Photography is a way of controlling your environment. It is a way of capturing part of it and putting it into your drawer. Here you get this 8 x 10 physical picture of something meaningful, in 2½ minutes. And you have control over the process. Your wife can say I don't want the dog in the picture, and you can crop it out."

Bashful entrepreneurs

About 10,000 new companies start up each *week* in the U.S., but Karl Vesper says that's not enough.

The trouble is, he says, that many of the new companies merely represent the incorporation of established small businesses. Vesper, chairman of the management and organization department at the University of Washington, argues in his new paper *Entrepreneurship and National Policy* that government tax and other policy encourages established small businessmen at the expense of innovative entrepreneurs. And, he assures us, small businessmen and entrepreneurs differ. "Entrepreneurship is concerned mainly with the creation of new businesses, some of which turn into substantial enterprises. Small business is concerned mainly with established, operating firms that don't have many employees," he says.

Politically organized small businessmen get preferential treatment, says Vesper. The Small Business Administration spends most of its time dealing with established small firms, which get most SBA-guaranteed loans. Both houses of Congress have committees to address the concerns of small business constituencies. Only the Senate staffs an entrepreneurship subcommittee.

Vesper believes that entrepreneurs work harder and more efficiently, generate more ideas and create more employment than established small businessmen. It's clear that many entrepreneurs get their ideas working for big companies. Some three dozen Fairchild Camera & Instrument alumni created their own companies, including Intel and National Semiconductor, between 1957 and 1970. More recently, former Hewlett-Packard employees formed Apple Computer and Tandem Computers, among others. But the bashful employees who haven't struck out on their own concern Vesper. "If the system offered more encouragement to those people," he says, "we'd have more startups and benefit from them more."

To encourage entrepreneurial wallflowers to bloom, Vesper proposes that the government guarantee more loans to startups, take equity positions in some new ventures and eliminate capital gains taxes on new-venture investments held for five years. He acknowledges that, aside from other difficulties, more startups mean more failures, but more entrepreneurial successes, too. Encouraging them, he says, "amounts to research and development in a social sense. I think we would be smart to do more of it."—**Subrata N. Chakravarty**

Professor Karl Vesper
Encouraging wallflowers to bloom.

A word from Bitty and Joe

THE PRESIDENT of the Josephson Bag & Canvas Co. greets every visitor at the combination store and factory on Main Street in Bridgeport, Conn. It is hard for Elizabeth (Bitty) Josephson not to. Her desk is right inside the front door. Bitty is 75.

If the door to the back shop is open, you can see Joseph A. Schwartz, Bitty's brother-in-law, showing a worker how to use a bit less canvas when cutting the tote bags that the com-

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Statistics show that it takes a full year to make enough to buy a new car.*

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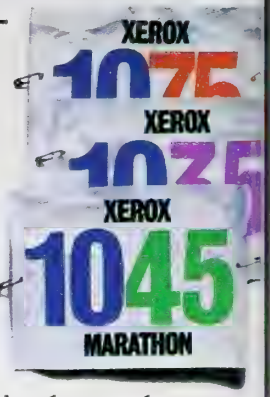
A Marathon with many competitors but no competition.

Xerox has embarked on a Marathon effort. To create a complete line of copiers that can withstand the greatest tests of endurance and stamina.

Recently, the first of these new copiers emerged. The Xerox 1075 and 1035 Marathons. Now, the Xerox 1045 joins their ranks, ready to outrun every one of its competitors.

Amongst the current crowd of compact copiers, the Xerox 1045 Marathon stands out in a class by itself. It's so advanced and offers so many options that other "comparable" copiers simply can't compete with it.

For instance, the Xerox 1045 Marathon is so adaptable, you can custom design it to fit your needs, choosin from eight possible configurations. None of its competitors offers you such a choice.



And with options like a high-speed document handler and a finisher that automatic ally collates and staples reports, the Xerox 1045 is the only compact copier with such big copier feature

But what makes the Xerox 1045 a

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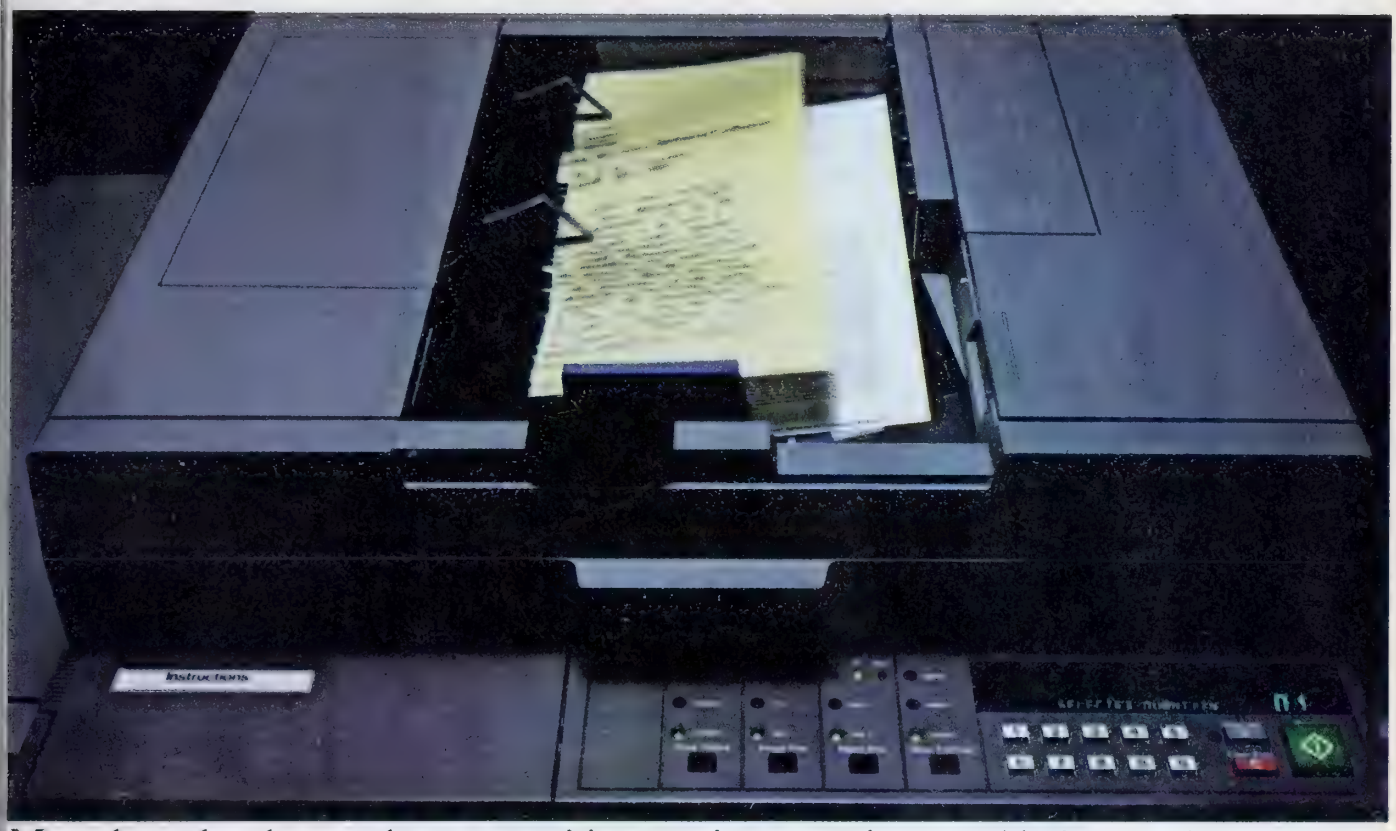

Marathon that leaves the competition behind is how it's been designed to run.

Every one of its major components has passed an unprecedented array of stress tests.

And with the help of sophisticated electronics, no other compact copier can come close to the 1045's ability to "think" for itself.

In fact, the Xerox 1045 is so intelligent, it can show how to avoid minor interruptions and help you through complex copy jobs.

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pany makes. Companies stick their logos on the bag and use them for promotion. Joe is 82.

By the terms FORBES uses to measure industrial giants, Josephson's isn't much. It employs 34 people. Sales last year were about $1 million, with pretax margins somewhere near 10%. But with 10,000 small businesses forming every week, and small business failures at record highs—50% of new businesses will close within five years, if averages hold—you might learn something listening to Bitty and Joe. They have 120 years of work experience between them.

That Bitty's desk stands inside the front door is no accident. "You have to be there," she says. "Sometimes they don't know what they want, or just have an idea. Most of our work is custom, we don't turn business away. That's how we got into repairs. It's a tiny part of our sales, but people remember the work and come back."

Bitty's approach to pricing is similarly straightforward. "We are not cheap, but we don't gouge people either, and they know we do good work," she says. Her management style is simple, too. "I hire good people with a skill," she says. "If they can do something that we don't have a product for, we find something."

Bitty's uncle and a partner started the company in 1922. Bitty joined as a bookkeeper in 1927—when Coolidge was president and Babe Ruth hit 60 home runs. "At first we made coal bags for the delivery man to carry into the house and people to store in their basement," Bitty recalls. "When oil heat came in we made canvas covers for trucks. Someone asked us to do boat covers and the small tote bags—they're really just a smaller version of the coal bags—became popular. We kept making what people wanted."

Bitty inherited the firm 30 years ago. In 1981, after 59 years of making canvas products, Josephson's decided the world needed engraved Lucite knickknacks. The Acricite division, started by Joseph Schwartz' son, now makes dozens of products, including letter openers and wastebaskets from Lucite that can be engraved with names, slogans or logos. The Lucite gimmicks have helped bag sales. "You sell the Lucite at three trade shows a year," Schwartz says. "Well, we started taking some of the bags with us and all of a sudden we started getting orders for the bags from the trade shows. So, the addition of the line has worked out."

So let's see: Don't turn away business, do good work, price fairly and adapt to the market. Watch your costs. That's the word from Bitty and Joe, and they didn't learn it at the Harvard Business School.—**P.B.B.**

Elizabeth Josephson of Josephson Bag
"We kept making what people wanted."

Your lease for profit

For most companies, the office is the largest single financial commitment, yet very few people give it any thought. That's one of the biggest mistakes you can make."

So says Charles S. Isaacs. He is senior research director for the real estate consulting and brokerage firm of Kenneth D. Laub and Co., Inc., which has worked for IBM, AT&T, General Motors and others. Isaacs says the real estate strategies that work for the Forbes 500 will work for smaller up-and-comers, too.

- Think of real estate as another asset or investment. Consider leasing more space than you currently need, so you won't outgrow it too quickly. Plan for growth as far in advance as ten years to lock in low rates on long leases. Meantime, you can sublease extra space, possibly at a profit.
- Watch out for the "loss factor." That's the difference between rentable and usable area. Some landlords make you pay for unusable areas such as stair landings and corridors. In some cases the difference can be as high as 40%. "So $12 a square foot in one building can be a better deal than $10 a square foot in another," says Isaacs.
- Before signing a lease, look at supply and demand as well as new construction. Landlords often offer bargain rates to renters of space under construction in order to secure financing. You can benefit if demand increases before the building is finished. A firm that committed itself to a 15-year lease of 24,000 square feet in a new building in New York was able to sell the lease back to the landlord at a 50% premium, earning $2 million on the deal without ever having occupied the space.
- Bargain down escalation clauses. Rent increases linked to the Consumer Price Index usually allow the landlord to profit from rising costs because his major expense is often fixed debt service that stays fixed despite CPI increases. Use this knowledge as leverage against the landlord.

"Above all," says Isaacs, "remember what they say about shaking hands with a landlord: 'Be sure to count all of your fingers afterwards.' "—**John A. Byrne**

WORD TO THE WEALTHY.
AVING ONE'S CAKE AND EATING IT TOO IS LARGELY A MATTER
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Bill Bernbach was a giant of American advertising. How will his agency do now that its founder is gone?

The Bernbach legacy

Neil Austrian of Doyle Dane Bernbach
"Everyone wants to be with a winner."

By Pamela Sherrid

UNDER ITS charismatic founder William Bernbach, Madison Avenue's Doyle Dane Bernbach for decades refused to help sell cigarettes—a lonely stand among the big publicly held advertising agencies. Bernbach died in October at the age of 71. Before his death, he told his colleagues they were free to make up their own minds about cigarettes. Last winter they did just that. DDB bid for and won Philip Morris' Parliament account.

"It was the most difficult personal decision of my nine years in the business," says DDB's new chief executive, Neil Austrian, 43, Bernbach's handpicked successor.

No wonder. Bernbach left a grand legacy. He personally changed the face of advertising in the Fifties by discarding the hard sell in favor of visual style and sly humor. The result: classic campaigns like Avis' "We Try Harder" and Volkswagen's "Think Small." On the strength of its original product, DDB became the nation's tenth-largest advertising agency, with worldwide billings last year of $1.2 billion and gross revenues of $176 million.

Bernbach hadn't actively run the agency for several years before his death, but he still played the role of father figure and ultimate critic. Even in the last year of Bernbach's life, major clients talked with DDB because he was there. Joseph Daly, a star of Bernbach's generation whose specialty was managing accounts, retired from the chief executive's job when Austrian took over in September, putting a whole new generation of leadership in charge.

So, how's the new team doing? Its debut was not auspicious. After seven years of uninterrupted growth, 1982 earnings fell 30%, to $7.6 million. The culprits in the decline: a big loss due to the recession at DDB's previously profitable subsidiary that handles employment-recruiting advertising; devaluation of the Mexican peso; moneylosing operations in the Far East; and departure of the big Pan Am account. It alone would have contributed $60 million in billings.

Clearly, Austrian has his hands full. He must deal with the skeptics who doubt whether the agency's preeminence can survive its founder and he must deal with the immediate problems. Neil Austrian is a straightforward and amiable financial man with no pretensions to Bernbach's genius in the creative side of the business. But he knows how to work with and

to empathize with the creative types—else Bernbach would not have picked him. A relative of Bernbach by marriage—"my father's brother-in-law was his brother"—Austrian got to know Bernbach at weddings and bar mitzvahs. After a first job selling IBM computers, Austrian earned an M.B.A. from Harvard and worked for an investment banking firm. He then set up a finance shop with some colleagues in the early Seventies. That's when Bernbach began asking him for business advice. Austrian joined the agency in 1974 as its chief financial officer.

"DDB needed someone to make it more of a business," says Paul Bernbach, son of the founder and a director. "Neil did precisely what he was brought in to do," he adds. Paul's continued support is important to Austrian: The Bernbach family, including Paul and brother John, who runs DDB's London office, owns 16% of the firm's stock, making it the firm's largest holder.

DDB has the industry trends working in its favor. Ad spending is growing faster than GNP and big agencies, which offer varied services here and abroad, are growing faster still.

Austrian's first full year in charge looks like a good one for DDB. Economic recovery has already spurred "help wanted" ads, relieving the pinch at DDB's recruitment agency. That operation, acquired in 1979, is part of Austrian's sensible strategy of diversifying within the advertising business by buying specialty agencies. His latest purchases include an agency that concentrates on medical products and a public relations firm. On the strength of a good first quarter and an earnings recovery this year, DDB's stock is selling at 28, a neat doubling from last year's low of 14.

But in DDB's main business—winning the dollars of big national and international advertisers—the longer-term future remains a question mark. Two of DDB's biggest and oldest clients, Volkswagen and Polaroid, have problems that might force them to cut ad spending. Atari, another major client, is having difficulties, too.

Under these circumstances, winning new business is crucial—yet DDB is in a slump. That's one reason that the new Parliament account is so important.

Especially visible are DDB's problems with airline clients. The agency resigned the American account under pressure in 1981 and immediately picked up Pan Am, only to have Pan Am fly out the door a few months later. Austrian admits he is unhappy. "Everyone wants to be with a winner," he says.

To shake up DDB's new-account efforts, Austrian has promoted and brought to New York salesman Barry Loughrane, who built up West Coast operations. And in the same reorganization, he created a strong triumvirate at the top by giving Roy Grace, DDB's award-winning New York creative director, responsibility for those tasks nationwide.

Under Bernbach, creative talent flocked to work at DDB. "There's enough talent at DDB for 50 agencies," says John Slaven, Volkswagen's manager of advertising. Keeping the excitement that keeps talent happy is probably Austrian's biggest challenge—the factor that will determine the bottom line, not just in 1983, but far into the future. ■

As I See It

Does history have any lessons for coping with unemployment in the age of the electronics and service industries? Yes, says a historian of innovation.

Therefore, be bold

An interview with Christopher Freeman

By Rosemary Brady

We are impatient to know the results of change. Will the new microelectronic industries bring us fresh economic growth? Or mass unemployment? And should the free market or a "national industrial policy" govern the pace of change?

Forbes recently listened to the views of two men on this subject. One, economist Barry Bluestone, in an interview beginning on page 82, favors industrial policy that would slow down and mitigate the effects of technological change. The other, England's Professor Christopher Freeman, a historian of technological innovation, also favors public policy but to speed up and spread the use of new technologies. The sooner society adapts, the better, says Freeman, 61, a disciple of the late Austrian economist Joseph Schumpeter (Forbes, *May 23*). "Schumpeter," says Freeman, "understood the most important driving force in the economy, the opportunity for new profitable investment associated with the emergence of new technologies."

Freeman: I think in each long wave of expansion of the world economy, you had certain technologies that are the key technologies for that period. There was a huge investment in railways in the 1860s in the U.S. and Europe. But railways were not just important as railways. There was a huge investment in steel rolling stock, in locomotives, railway equipment and rails, so the steel industry and the engineering industry were swept upward by the railway boom. And when you had a railway network it meant every industry had the opportunity to reorganize its transportation and distribution.

Electric power did the same thing. Once you had electric power, you could reorganize your production in almost any industry. You could reorganize the home. Once you had electric power in the home, you could use all sorts of appliances or equipment.

If you take the present period, I think microelectronics is just the same kind of key technology. It has the potential to change utterly the entire economic and social system. If you want to have an intelligent public policy to bring us out of this recession, it would be a public policy that creates the most favorable conditions for the all-pervasive new technology to flourish. Then you will get all the

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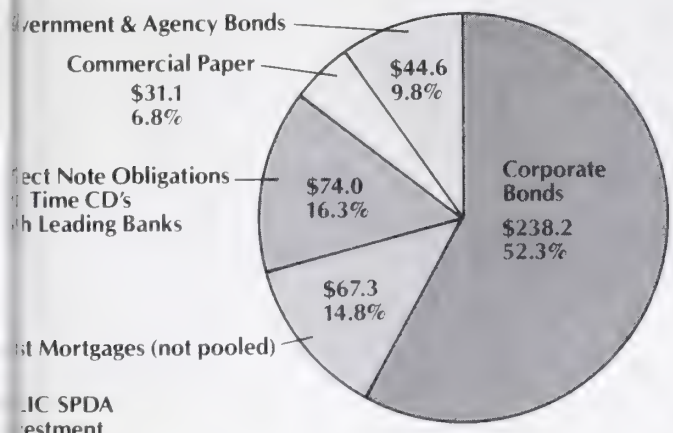

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JAL 62

other investments and secondary effects facilitated by that trigger.

Okay. But that doesn't do much for steelworkers. Nor does it explain 10%-plus unemployment.

Freeman: What happens is that the new technology sets in motion the mechanism for cost inflation. Firms pay a salary double the prevailing rate to get a good computer programmer. Then other people say, "If they're getting that much, we should get that much." So you have an element of cost-push associated with the skills linked to new technologies. That means there is an impetus for technologists to find additional technical advances that would reduce the pressure on labor costs. In the early days of the electronics industry the element of hand assembly was enormous. But as things developed in the 1960s, you had more and more specialization of machines, so that instead of having to assemble the transistors, you had them all on one chip. The industry became more and more capital-intensive.

Will the new electronics industry provide as many jobs as the old automobile and steel industries?

Freeman: We should certainly be more optimistic than pessimistic. But a lot of complicated private and public institutional response is required for the period of readjustment in which the older technologies and industries decline and disappear, and the new ones flourish. It's never easy to see how to do it. In the 1930s people did not know how to get out of the slump. The New Deal didn't work. In Britain the coalition government tried various things. None worked. We didn't get rid of our national unemployment until the Second World War, when we found how to use the power of government to manipulate credit arrangements and investment programs.

Later the availability of these credit arrangements allowed large numbers of people to buy houses and cars. And there was public investment in roads. The infrastructure created made it possible to expand, almost to the limit.

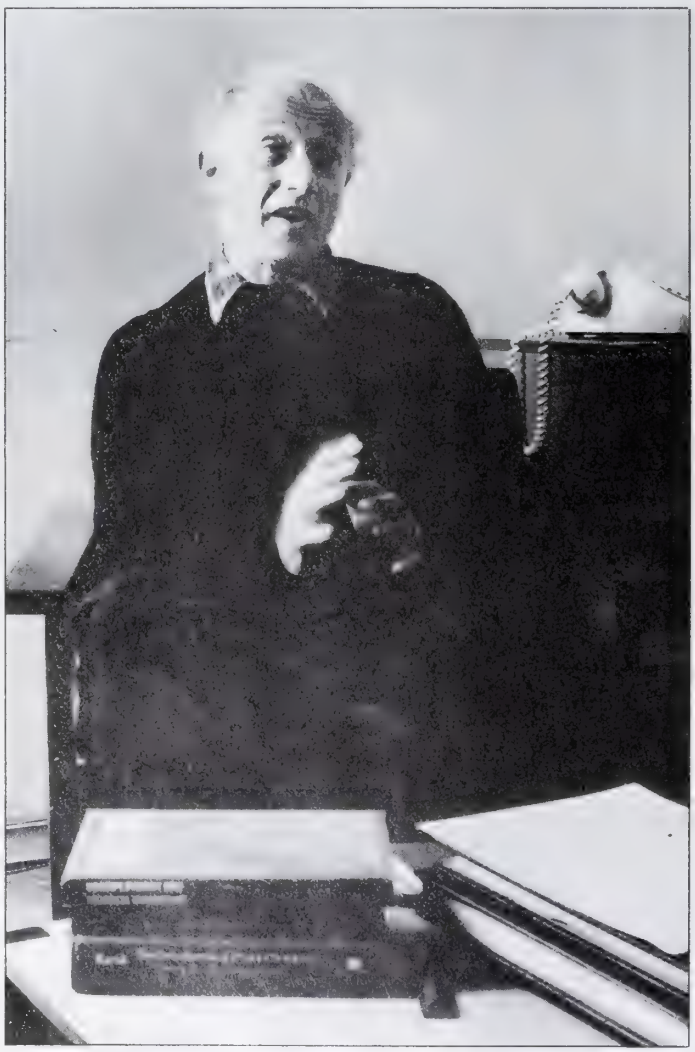
In the 1850s and 1860s it was the [changing] legal framework for access to land and capital. The construction of railway networks required enormous amounts of capital, leading to the joint stock company in the 1840s. The institutional inventions related to railway construction were the necessary precursors to the railway boom. The innovation in the 1880s and 1890s of electric power generation also required a new legislative framework. What should be the share of local cities? What was their role in relation to these networks of power supply? All that had to be sorted out for electric power to grow at an enormous rate between 1890 and 1914.

Do you see any examples of such a "technology diffusion" policy being implemented today?

Freeman: I think Japan will become the leading industrial technical power for the next 40 years. Japan has been prepared to create an institutional, educational and political framework geared to the rapid diffusion of the key new technologies. In Japan they have said textile firms are going to decline in employment, so there are textile firms virtually rented out to electronics firms. The Japanese realize you can't keep old industries going on indefinitely, so they find new industries to employ people.

When Britain had the industrial revolution, the Germans were very, very worried. [Friedrich] List, who was the leading German economist at that time, was most impressed by the contrast with what was the Japan of that day—Britain. He wanted Germany to imitate England.

And, of course, there were a lot of Germans who said, We can't imitate England. We have all these principalities. We have the Free States of Hamburg and Lubeck. We have Bavaria and Prussia, and so on, and it led to the German unification movement, an enormous social change. It also led to a massive effort pushed by List to introduce massive technical education on a scale surpassing Britain. They did it, and had the best system of technical education in the second half of the 19th century. They did it to overtake Britain.



Christopher Freeman amid his books at Sussex University
Studying the railroads to understand microelectronics.

And they succeeded. Do you think the U.S. will find the answers it needs?

Freeman: The main thing is to have new industries, so there will be a reshuffling process and adjustment process. You will never have 2,000 workers from Bethlehem Steel go lock, stock and barrel to a new microelectronics firm. What you will get is a kind of knock-on effect where there are new firms developing and recruiting people. It's not that everyone can move collectively from one place to another. It's that there is a whole variety of new opportunities opening up and people can move around without so much fear of unemployment. And they will move in all kinds of directions, which nobody can foresee exactly. ■

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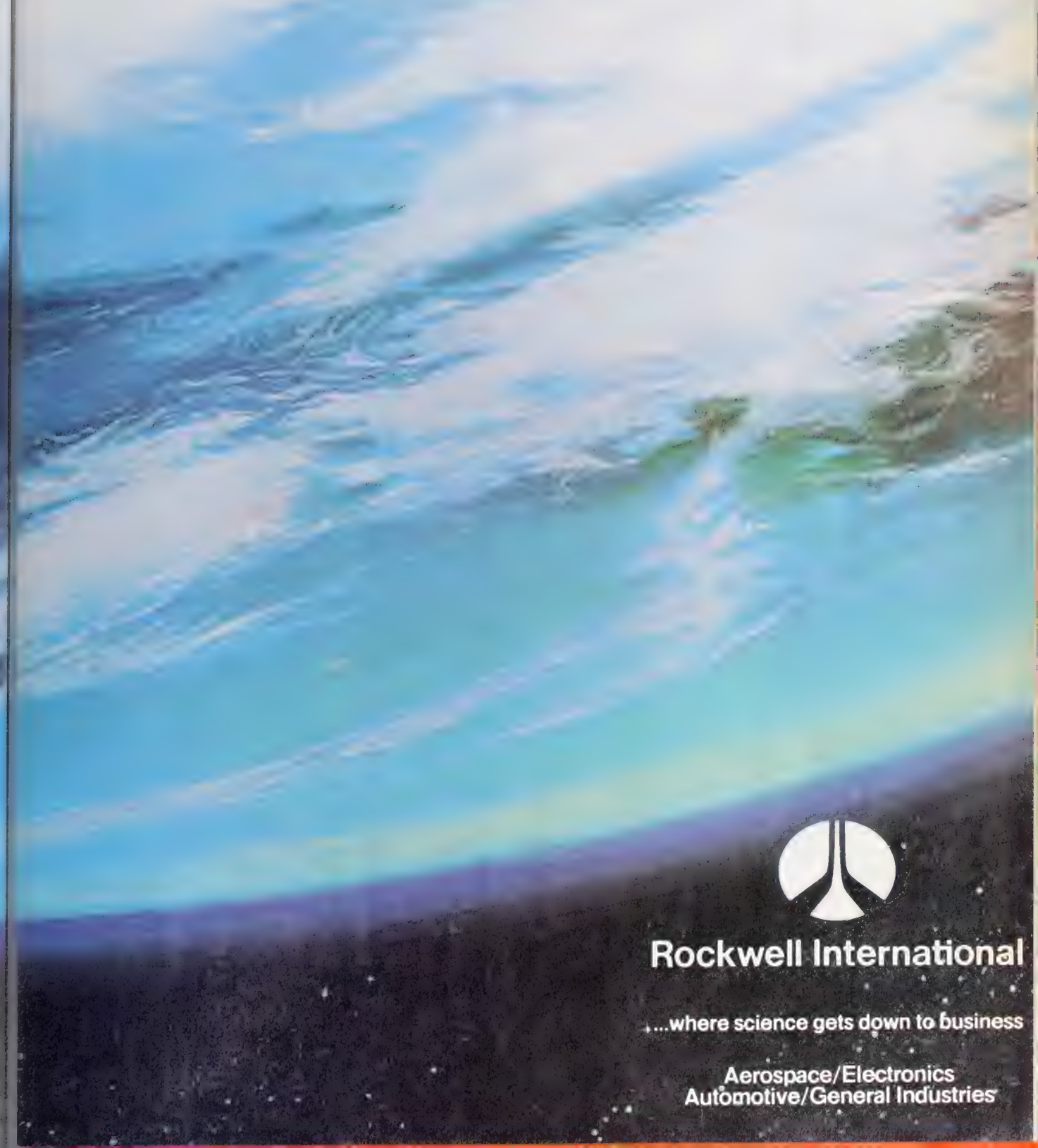

Does this country need more, not less, regulation, legislation and government planning? An insight into the liberal left.

The argument for plant-closing legislation

An interview with economist Barry Bluestone

By James Cook

DO THE DEMOCRATS AND liberals have an alternative to Reaganomics? Or can they only lamely claim that the Reagan Administration favors the rich over the poor? If they do have a program, it will probably bear close resemblance to the ideas of economist Barry Bluestone, 38, professor of economics and director of the Social Welfare Research Institute at Chestnut Hill, Mass.' Boston College. The son of the United Auto Workers' illustrious General Motors negotiator, Irving Bluestone, Barry Bluestone was born in Brooklyn, brought up in Detroit and educated at the University of Michigan. Bluestone tends to see the U.S.' industrial problems in adversarial terms, in terms of *them* and *us*, management and labor, as if management were really motivated by some malign impulse to get the workers. He blames the conglomerate for the problems of U.S. manufacturing, as if conglomeration were not a symptom but a cause. He looks vaguely to planning as a solution to our economic problems, and he would like additional social legislation. Old wine in old bottles? Yes, but not without its political appeal and about what business can expect to get if liberal Democrats return to power. Bluestone's ideas are likely to play a role in the upcoming presidential elections. FORBES dropped in to see him recently in his fifth-floor office overlooking a football stadium.

Economist Barry Bluestone

"We need rules that will tie the hands of managers, unions, economists."

Bluestone: The really serious employment problem, as I see it, is what I call the problem of the missing middle in the economy. In the old mill-based and smokestack industries, in terms of skill and wage level, jobs used to be distributed on a bell-shaped curve. That meant a lot of jobs in the middle, some jobs at the lower end, mostly in the nonunion supplier sectors, some jobs at the top—engineering, scientific jobs, management. What's replacing it is a concentration of jobs at either end.

High tech has this bimodal distribution, and you just don't have the $12- or $13-an-hour jobs in the middle, not in large numbers. The same holds in the fast-growing personal service and retail trade sector.

I see this as a very significant problem, not only economically but socially and politically. I happen to believe that a good deal of the political and social stability we've had has rested on the semiskilled worker who could afford a house in the suburbs—and that this, in turn, has been based on an industrial structure that has had this very large-scale middle. But if we're losing the jobs in the middle and getting a greater inequality in opportunity—well, we know what happens in polarized societies in other countries. They tend to be unstable, fraught with social costs that are painful to endure. That polarization is happening in individual industries,

between sectors and across the whole economy.

But aren't you bound to get dislocations like this when you have a severe and fairly sudden manufacturing recession?
Bluestone: It's more than that. Once you start to disaggregate, you realize there has been a shift from production work to nonproduction work and from steel to semiconductors and from North to South and Southwest.

Despite these changes, manufacturing has held its own. Its share of GNP has been stable for at least 30 years.
Bluestone: But the proportion of jobs you generate out of that constant proportion of GNP is significantly smaller. It's very hard to see where the recovery is going to come from in cities like Detroit, Flint, Buffalo, Youngstown, Akron, St. Louis or generally throughout that whole region. I'm saying there are very, very strong political repercussions. You saw a little bit of it in the 1982 elections. Look at the governors' races. The only industrial state where a liberal Democrat didn't defeat a conservative Republican was California, and many people suggest the race issue had a lot to do with that.

The antagonism between management and labor is growing again, and people are feeling that their interests are quite divergent right now.

Your contention is that a lot of this unemployment, a lot of this antagonism, could have been avoided, that 30, 32, 38 million jobs have been lost that could have been preserved if only we'd done things differently—curb conglomerate mergers, for example.
Bluestone: Certainly not all of them. But we're very much concerned about the statistic we developed with David Birch that 30% of all manufacturing establishments with 100 or more employees in 1969 were no longer in the same location or perhaps not operating at all by 1976. What is the impact of all those mergers and acquisitions? We are finding that certain very large social costs can be attributed to plant closings, community abandonment, loss of jobs and so forth. Should all of those social costs be picked up by the state or by individuals? Or should the rules of the game be modified so there are some constraints placed on management making these decisions, analogous to the constraints we've placed on them in terms of occupational health and safety, environmental protection and so forth? We've said that managers have to internalize some of these environmental costs,

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and by and large that is taken as a fair way of doing things. It's a constraint within which all managers have to operate. But doesn't that put the U.S. at a terrible disadvantage relative to our foreign competition? The answer is that these foreign competitors are often operating under even more extreme regulation than we have here—plant closing legislation in Germany, France, Sweden, England, for example. The Japanese attitude is, do everything to rationalize production short of layoffs in major industries.

Do you advocate legislation prohibiting plant closings?
Bluestone: I have never advocated prohibition. There are so many cases where capital mobility is desirable. But I am concerned when all of a sudden Atari comes out one day and gives 600 workers one week's notice. A lot of my friends in the business community say, "Well, we can police our own." I don't believe it. I claim we need plant closing legislation—in many cases—not to stop plants from closing, but to give workers in communities time to do some planning for reuse of facilities, retraining and in some cases the buyout of the firm.

What about the free market's role in determining plant closings?
Bluestone: I have very little doubt that in many cases, not all, the price system gives the private market some fairly decent signals about where new investment or disinvestment should be occurring. But it doesn't tell us at what speed that should occur. That's where you need to merge markets with planning. If there is a primary role for planning in our society—I'll use that dirty word again—it is to try to help in determining the optimal velocity of capital movement. I'm not saying that planning will give you the right answers. It sometimes gives you, flat out, wrong ones.

You're thinking of Japanese-style rather than Soviet-style planning, of course.
Bluestone: It is very clear that the influence MITI has had—the kinds of coordination they have between industries—has been on balance good for their economy. Their ability to disinvest in the shipbuilding industry without the social costs that would have attended a similar disinvestment in this country is partly attributed to the fact that they worried about every last worker and where that worker would end up.

Most Japanese companies are basically conglomerate, which you seem to think is the root of all evil.
Bluestone: I don't have any problems with conglomerates if we develop some public rules and regulations that make them more socially accountable. I would have liked to see somebody really go in and look at U.S. Steel's decision to buy Marathon Oil and see if that's the very best use of the resources they amassed, partly because of the trigger price mechanism.

But U.S. Steel had no choice. It had to conglomerate because unless it acquired a failing steel company the Justice Department would have objected. Marathon might far better have been taken over by Mobil, but our inbred fear of concentration prohibited that.
Bluestone: If there were protections built in, I could see all kinds of opportunities. In the aircraft industry, I'd rather have Boeing working with McDonnell Douglas to develop the 767 than seeking out partners in Italy and Japan—15% of the value of the 767 is built in each of those countries. But only if we have some way of holding these mergers socially accountable.

The price system gives the private market signals about where new investment or disinvestment should occur. But it doesn't tell us at what speed. That's where you need to merge markets with planning.

You sound sometimes as if you're really committed to maintaining some long-vanished status quo, trying to fix our industrial society at some halcyon time in the mid-Sixties.
Bluestone: Obviously the plan of the 1950s and 1960s was a good one, right? But now we need a new set of rules. Some of them will tie the hands of managers, labor unions, even economists at Jesuit universities. Let's at least have some debate over these issues and see if there isn't a better way of designing the rules of the game. The great thing about the Thirties was not the NLRB or TVA or AAA or the Blue Eagle. It was basically that we faced a lot of problems and we had a society willing to do some great experimentation—much of which failed miserably—but we weren't afraid to try something new.

Doesn't labor have to make some concessions? Didn't they get too much in the Sixties and Seventies and now it's come back to haunt them? My answer is yes. But isn't it possible to trade off—longer-term job security for, let's say, greater flexibility in job rotation and job placement? That's exactly what Ford and UAW negotiated in 1982. Ford is going to guarantee 80% of the workers in that plant lifetime job security, a guaranteed life wage. In return the unions and the workers have agreed to very significant reductions in the number of job categories. There has to be a rationalization in the steel and auto industries. The question is, how fast should they decline?

I'd have thought the answer to that question wasn't really in our hands.
Bluestone: We moved rather successfully out of agriculture into manufacturing, but we did that over a period of five or six generations. In many industries today the changes are occurring extremely rapidly—not only within a generation but sometimes within a decade. My fear is that the market is not giving us the proper signals about how rapidly we should be disinvesting in Detroit, for example, or how rapidly we should be reinvesting in Houston, how rapidly we ought to be disinvesting in autos and reinvesting in semiconductors. Again, this is how planning begins to deal with the dimension that the market doesn't.

Maybe the classic instance of planning is our response to the oil crisis: We decided the market was giving us a signal the system couldn't absorb, so we held the price of energy in the U.S. artificially low and encouraged many of the problems that developed a few years later—including the decimation of the auto industry.
Bluestone: U.S. policy did play a very important role in destabilizing the so-called OPEC cartel. We had some explicit government regulations and policies to try to reduce our dependency on oil. Part of it was a price issue, but a lot of it was a conservation issue: the 55-mile-an-hour speed limit, the mileage requirements for automobiles, which I think sped up the development of more fuel-efficient vehicles, the attempts to get industry and homes to weatherize. All of these were explicit government policies that I don't think the private market would have responded to at as rapid a rate. It led to the tremendous decline in the demand for oil. If anything, I would argue that government policy led the fight and was effective, quite effective.

Government planning worked?
Bluestone: Rather well. ■

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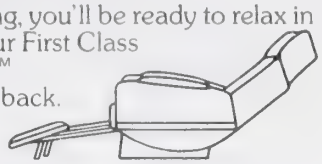

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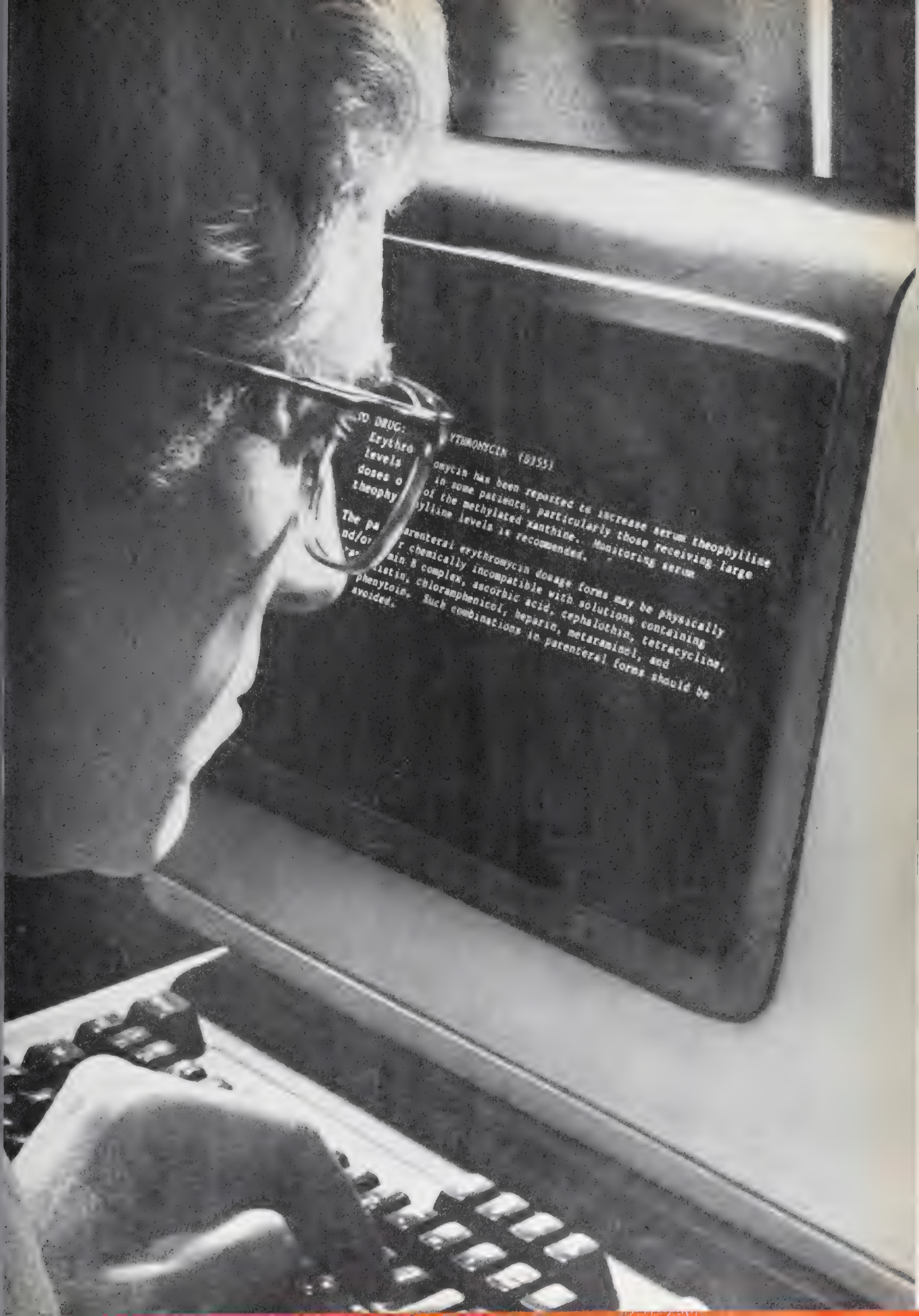
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Coal for the lamps of Europe (and Japan) is looking less like an export market, more like a flickering hope.

Up in smoke

By Rosemary Brady

AMERICA'S VAST COAL reserves, a few years ago, were to become the next great U.S. export, perhaps as great as food—a powerful cash machine for the railroads, mining companies and coastal port cities. Spurred by a 1978 International Energy Agency forecast that world demand for steam coal would nearly treble by the year 2000, Royal Dutch/Shell invested $680 million in a joint venture with St. Joe Minerals in the U.S., Sun Oil put up a further $300 million to buy Elk River Resources.

But the American producers' dream has gone up in smoke. Europe is smothered in coal. Britain, the Common Market's largest producer, sits on a 47.2 million ton stockpile, enough to last five months. There is a six-month supply overhanging the European market as a whole. Says Connie Holmes, executive director of the Washington-based U.S. Coal Exporters' Association: "The market is very weak. We will be doing well if we export 40 million tons to Europe this year."

That borders on disaster. Forty million tons is 18% below last year's exports, barely two-thirds the export level achieved in banner 1981.

Worse, adds Holmes, prices have been slashed to the point where U.S. exporters "are losing a lot of money."

For a few brief years the coal export dream seemed to be coming true. Between 1978 and 1981, U.S. coal exports worldwide (Canadian sales excluded) jumped from 25 million tons to 92 million—60% to Europe, the rest to Japan.

But it was a misleading signal. Rather than supplying a growing market, the U.S. companies were mainly filling temporary shortages. The Polish crisis cut that country's exports to the Common Market by 72%, to 3.8 million tons, in 1980 and 1981. And in Japan the Americans sold into the gap created by a prolonged Australian miners' strike in 1981.

Today the Australians are back at work, and the Poles are slowly returning to work. And coal's basic markets are shrinking. In Europe the consumption of coking coal for steel dropped 6% in 1982 and will decrease further between now and 1985 as European steel producers close down around 30% of capacity. Steam coal consumption increased 1.7% last year, according to EEC figures. That was far short of the 8% to 10% annual increases imagined back in 1978. Industry has moved very slowly to convert to coal, says EEC coal director Karlheinz Reichert, probably because the payback period for such investments is six to seven years. The fact that energy consumption in Europe is now at its lowest level since 1975 does not suggest a fast turnaround.

A coal export pier in Hampton Roads, Va. ***U.S. exporters merely filled a gap.***

Why can't the U.S. producers at least maintain the market share they built in 1981? Largely because of price. Holmes of the Coal Exporters' Association says that U.S. coal prices are competitive at the mines, but that rail transportation rates—which add $18 to $20 a ton—make U.S. coal the most expensive in the glutted markets. South African coal sells on the spot market in Rotterdam for about $36 a metric ton for certain grades of coal, vs. $50 a metric ton for comparable U.S. coal. In the Japanese market, says Mark Joseph, president of Anker Energy Corp. (and chairman of the Coal Exporters' Association), prices for coking coal contracts have dropped 20% this year, and margins are bad for both Australian and American suppliers. But Australian steam coal is cheaper than American because it's closer to the market. In South Africa, explains Joseph, the wage rates are much cheaper than in the U.S.

The Coal Exporters' Association still hopes to increase its share of the European steam coal market from 19% to 26% after several more electricity generating plants convert from oil to coal after 1987. Because Europe's coal is deep and expensive to mine, the EEC estimates it will import 40% of its needs by the year 2000—up from 22% today.

But that doesn't do much for the producers now. And things could get worse. West Germany imports virtually no metallurgical coal and uses a strict quota system to limit steam coal imports. Britain already restricts coal imports for generating electricity to 75,000 metric tons, and that rule may be tightened this autumn, a National Coal Board spokesman says. In the European Commission, meanwhile, Britain may push harder for a common energy policy that would encourage coal consuming countries to buy more from Europe's stockpiles rather than from Australia, South Africa or the U.S.

In short, the U.S. Administration, with its hands already full trying to open European markets to U.S. agricultural exports, may be confronted with a similar headache in coal. ■

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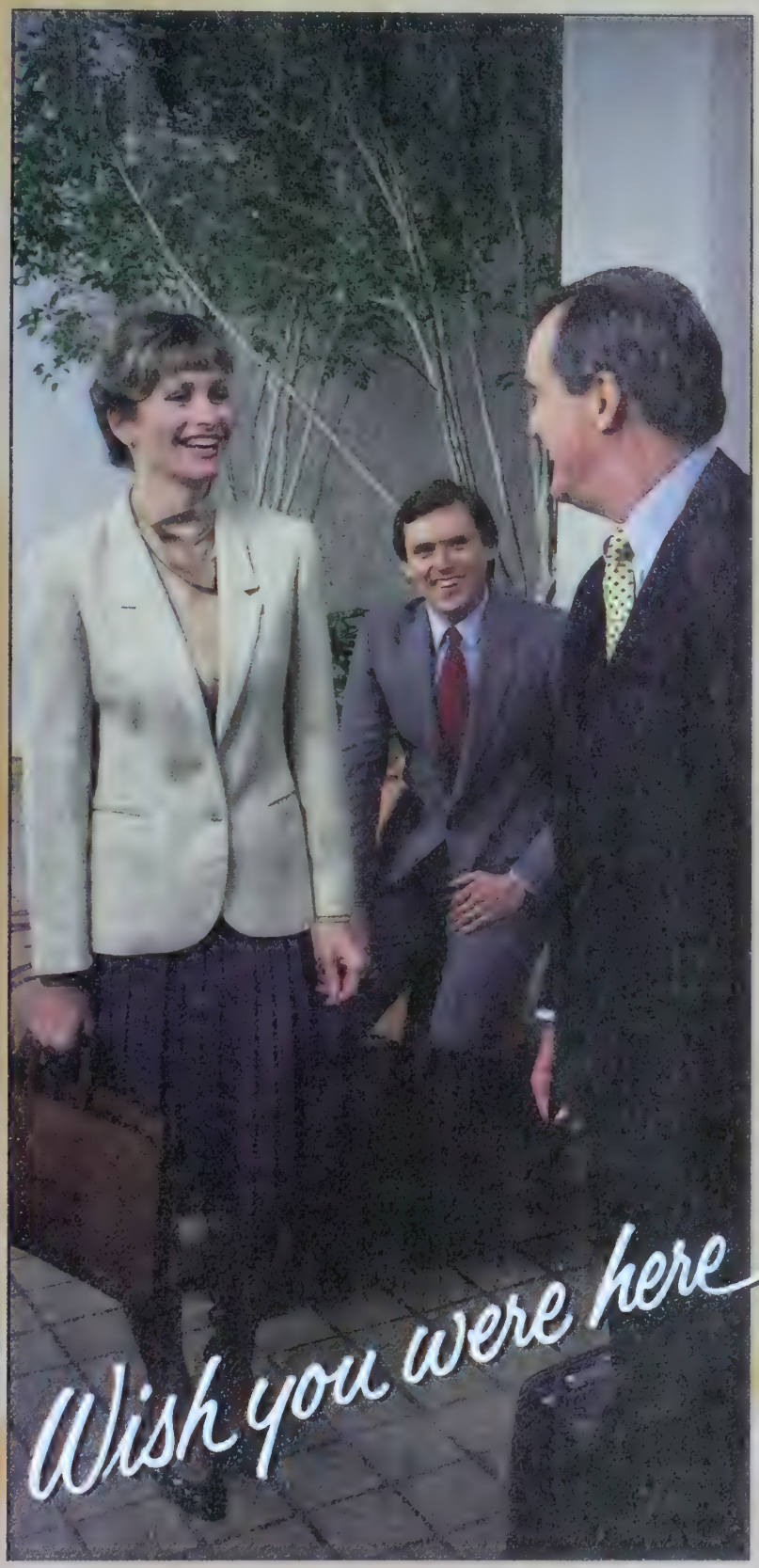

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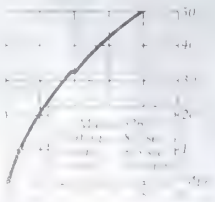

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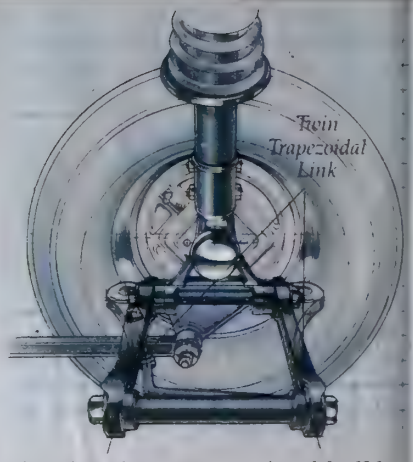
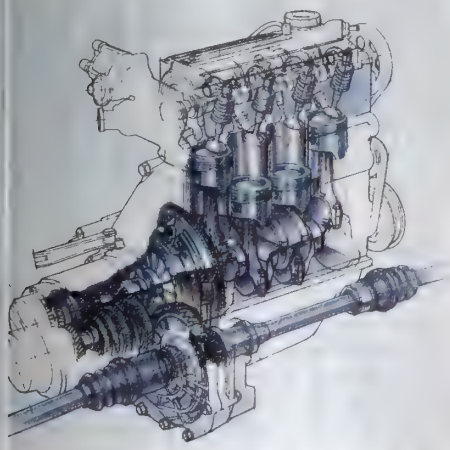


The independent rear suspension of the 626 uses patented Twin Trapezoidal Link lower arm. Its unique geometry improves directional stability by causing the rear wheels to "toe in" when cornering or going over bumps.

41 EST. HWY MPG **29** EST. MPG [illegible] comparison. Your mileage may vary with trip length, speed and weather. Highway mileage will probably be less. [illegible] estimated retail price. Actual price set by dealer. Taxes, license, freight, options (tires/al. wheels shown) and other

ember of the exclusive society of refined road cars.

ll-new, transverse-mounted, 2-litre, overhead cam engine has 8% fewer moving parts than previous 626 engine and is 57 lbs. lighter. It is lso quieter, more compact—and more powerful.



Standard features include 5-speed overdrive transmission (3-speed automatic optional) • Steel-belted radial tires • Rack-and-pinion steering • Power-assisted front disc brakes • Front and rear anti-sway bars • 6-way adjustable driver's seat • Halogen headlamps • Electric rear window defroster • Full cut-pile carpeting • Carpeted trunk • 60/40 split fold-down rear seat-backs • Remote trunk release • Tilt adjustable steering column • Quartz digital clock • Tachometer • Trip odometer.

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The microcomputer boom has spawned a high-tech cottage industry. The margins can be as incredible as the growth rate.

Software to go

By Harold Seneker and Jayne A. Pearl

CONSIDER Fred Beyer, a pleasant fellow just turned 40, who lives in blue jeans and once ran a stock-car racetrack in British Columbia. And his friend, Joe Ming, a New Yorker with a law degree and a yen to be in business. Undistinguished, if unordinary, men, but more typical than you may think in their ambitions.

Their fledgling company, Quick Brown Fox, is what the computer industry calls an "ISV"—Individual Software Vendor. Fred's yet-to-be commercially proved talents at programming are its principal asset. At the present time, they have 12 employees and a word processing program designed by Fred for personal computers that retails for $65 (the main competing program, the popular Wordstar, has a list price of $495 and sells, discounted, at $310), and the company hopes to sell over 100,000 copies at a $6 to $12 profit each.

The reason such high hopes cannot simply be dismissed out of hand is the microcomputer. Suddenly there are about 4 million personal computers around, with 5 million more expected to be sold this year. And most of the new owners have discovered the crying need for good software, which is to computers what blades are to razors. So a grass-roots industry has sprung up, writing, packaging and distributing millions of software diskettes (which cost $2 blank, wholesale) at up to $495 each, retail.

It has been too fast to get much of a fix on it, but the dimensions are surely big. "We figure $865 million," says Janice Antonellis, senior market analyst for International Data Corp., the Framingham, Mass.-based computer market research firm. "Of that, $500 million came from individual vending companies. But we only count the firms that do over $1 million a year. Also, that's at wholesale. At the retail level, it might be two to three times that much."

Senior research analyst Robert Freeman of Mountain View, Calif.-based Input, another well-known computer research firm, thinks microsoftware is growing 43% a year, that is, doubling in two years; IDC says 57% compounded, which would mean its multiplying an even more astounding 2½ times every two years.

Either way, who makes the programs? Not big corporations. It turns out they are a golden, if nonguaranteed, opportunity for the Fred Beyers and Joe Mings of the world. Much of such programming really can be done more competitively working solo at a personal computer, even on one's kitchen table, than it can be done for a

Joseph Ming of Quick Brown Fox with friend
A business that does best in an unstructured atmosphere.

big corporation.

"Some guy working by himself may be willing to gamble a man-year of his time developing a product that may eventually net him anywhere from $200,000 to $1 million, if he's successful," explains Edward Currie, president of Lifeboat Associates, a publisher of personal software in New York City. "But a large corporation would have to put in $500,000 to $1 million to do the same work, using several people with perhaps less motivation than the guy working alone, paying assorted corporate overhead and after all that, it doesn't know a priori if it will have a success or not."

QBF programming talent Fred Beyer
Decamped to Phoenix; saving up for a bus.

A lot of people—no one knows how many—have leaped into the opening that's available when you have almost no capital costs except your own spare time: *PC Clearinghouse Software Directory*, a publication of PC Telemart, Inc. of Fairfax, Va. that makes an effort to be as comprehensive as possible, has identified over 21,000 microsoftware packages for sale from 2,912 different sources.

For many, of course, it turns out to be a leap into the void. Currie estimates that perhaps 1 program in 100 is a clear-cut commercial success.

Nevertheless, there is now an entire industry to take these would-be software millionaires to market.

Some of those 2,912 are publishers, such as Lifeboat Associates, which edit, package and sell individuals' programs. They pay their authors royalties, consciously imitating book publishers or record companies.

Some are distributors who serve as outlets for self-publishers like Joe and Fred, who hope to build a company around their programs. The distributors sell their wares to computer stores and others.

God alone knows how many are direct mail distributors, whose ads speckle the dozens of computer magazines that now exist.

And a handful are "establishment" software companies like Management Science America or, recently, Visicorp, that will buy outright or pay advances ($10,000 to $50,000 against royalties, according to CEO of Management Science John Imlay) on programs for their own label and for established markets.

There is even at least one literary agent offering his services to budding software authors (FORBES, *May 23*).

Of the retail price paid by the customer out there shopping for something to run on his newly uncrated PC, IDC figures that 35% to 40% stays with the retailer, 15% to 20% will go to the distributor, 35% to 45% to the publisher, if there is one, and then 5% to 20% to the original author. People in the industry expect the spread in royalties to narrow down to something like the 8% to 15% common in the book publishing business. On the other hand, notes IDC's Antonellis, "one person, like the author, may capture more than one of these four levels of revenue."

Who are these people who are seeking fame and fortune?

"With mainframes, it used to be like a member of an orchestra, each working on his little piece of a very large program," remarks Trip Hawkins. He is the 29-year-old president of Electronic Arts, a startup in San Mateo, Calif. partly backed by Steve Wozniak of Apple Computer fame, to groom and publish a new breed Hawkins thinks he sees emerging.

"Now that each author can do the whole program himself, he is more like a novelist or a rock star. So the microcomputer changes the kind of person involved. They don't really fit well in a corporate environment."

An understatement. Fred and Joe, for instance, who rent the back of a floor in an aged loft building in Manhattan's SoHo district, maintain—in the center of one of the two large rooms— a coop of four or five pigeons passed along by a neighboring tenant. Try that in the offices of IBM sometime. But even this is too constraining, says Fred. "Eventually, I'd like to tour the country in my own bus, and have my office and computer terminal in the bus."

Once a program is in distribution, it faces a fickle market. "No one knows why one program is really successful," says Currie. Its commercial life might be as little as a few months for a hot video game, or it might extend for years for a business application. But sooner or later most will get shoved aside by a new package, one that's better, or cheaper, or simpler to use or simply more gaudily packaged and advertised.

At the moment, reports Currie, a lot of the work being done on microsoftware is "cosmetic, like putting manuals into IBM format and putting four-color on the package." Or it is imitative, "like recasting an old 8-bit program to 16-bit." That should change because there's so much room for improvement in existing software. "A lot of what's out there today is just junk," he complains.

Nevertheless, as competing programs appear, the cost of surviving in the marketplace naturally goes up. "One company, Lotus, is doing a promotion for its program called 1,2,3, a hot-selling business package, that must be costing them $1 million a month," says Dennis Vohs, executive vice president of Management Science. "That'll raise the ante a little. And pretty soon we're going to start advertising on television. That'll raise it a bit more."

But meanwhile, whole new product categories or unthought-of specialties inevitably appear, limited only by the

imaginations of people with PCs. Horoscope programs, veterinarians' accounts receivable programs, a sewing pattern resizer, genealogy programs, dairy herd records, all these already exist.

Says John Imlay, of MSA, "What you look for is a repetitive application that is a bother to people and that you can put on a machine and make 10 times easier. It can be anything, anything at all: handicapping golf, scheduling bowling lanes or johns in a bordello, you name it."

"We won't remain a one-product company," Joe hastens to tell a visitor. "It's too dangerous." Their next venture will be a program to teach kids touch-typing, dubbed Quick-Finger. Fred brightens. "It will play like an arcade video game, see, and you'll have to type faster and faster, and eventually keep your eyes off the keyboard to keep winning."

Time will tell how things go for Joe and Fred. Meanwhile, on the following pages FORBES looks at seven other new entrepreneurs—some who already have made it big in this space age cottage industry, some who clearly seem about to.

Software Rx

It is an adventure sidestepping through the sawdust and buzzing drills at Health Information Systems' expanding Brooklyn quarters to President George Weinberger's spartan but comfortable office. Once there, Weinberger, 35, is quick to relate how HIS, which leases hardware and sells software to the health care industry, grew from a $50,000 investment in 1978, went public in 1980 and now has a market value of $100 million despite sales of only $7 million.

Not bad for an ex-Brooklyn College computer professor who quit six years ago to become a consultant. One of Weinberger's early assignments was a rush job to help a health care facility deal with a last-minute revision in a New York State billing law. Working 80 to 100 hours a week for three weeks (sending someone to his home for a change of clothes), he finished his program on time—only to fall asleep at his client's terminal during installation.

But Weinberger awoke to an idea to market his brainchild to others in the industry. One surgical supplier client, Barry Septimus, was so enthusiastic about the potential that he joined Weinberger to start HIS and is now chairman.

At the time most nursing homes, hospitals and clinics still relied on outside service bureaus like Shared Medical Systems or McDonnell Douglas' McAuto to process their billings. Weinberger's approach made in-house computers more cost-efficient and more accessible to personnel with no computer skills. By offering to lease (mostly) Qantel minicomputer hardware along with his software, Weinberger saved his clients a step and could guarantee clients would keep up with the state of the art.

That's capital intensive—"Barry and I pooled our funds and borrowed from friends and family," Weinberger recalls. "At one point we were in debt to the tune of $800,000." But it worked. When Weinberger brought HIS public in November 1980, it was not cash he needed anymore, but visibility. Says he, "How can hospitals with budgets many times larger than ours have confidence in HIS' small revenue base? Going public gave us an aura that we weren't just a little storefront partnership." Of course, Weinberger didn't mind the $2.7 million raised from the initial 350,000 shares sold at 7¾.

But Weinberger had big things in mind, among them adapting his minicomputer program to take advantage of big, powerful IBM mainframes in the larger hospitals. HIS programmers "thought I was crazy," he recalls.

Weinberger of HIS
"Going public gave us an aura."

"They thought it would be impossible to translate the program from a minicomputer, designed to run with maybe 20 terminals, to the completely different structure of a mainframe that can support some 2,000." Nonetheless, the company announced its new product in May 1982. The stock market reacted ecstatically, boosting HIS from 8 (adjusted for a 1981 2-for-1 split) to about 21 by year-end. HIS—unusual in its industry—met its Jan. 1 deadline for completion. Weinberger hopes to install 12 to 18 systems over the next 18 months. At over $1 million each, that could mean revenues of $20 million. After yet another 3-for-2 split and a 50% stock dividend, the stock is back up, trading at about 32, making Weinberger's 31.6% stake worth a cushy $33.4 million.

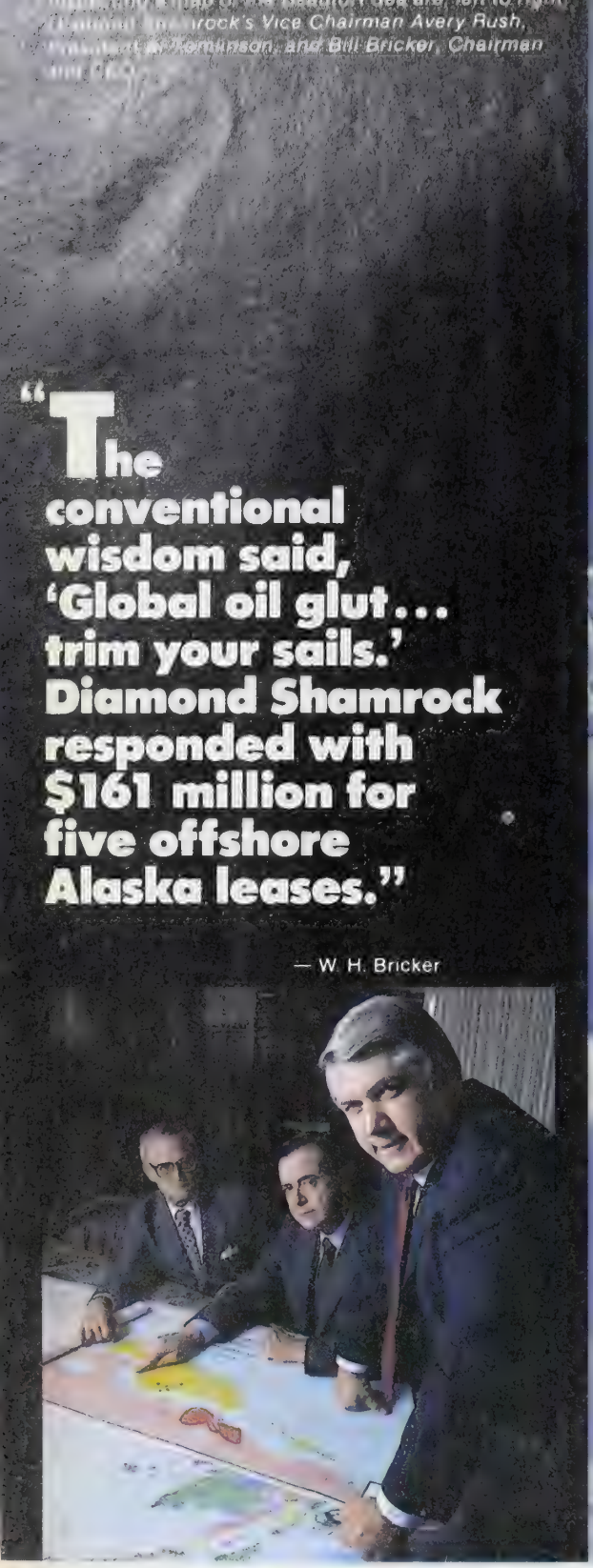
Accounting for the millions

When Ronnie Green applied for a loan in 1977 to buy one of ComputerLand's first franchises, his banker simply laughed. Green, a data processing manager for 11 years who had originally hoped to be a research biochemist, lacked experience running a business. But he managed to get a $50,000 Small Business loan to set up shop in San Jose, Calif., and within two months he turned a profit.

Green found his sales job tough in those days, with virtually no software on the market for home computers. He also saw an untapped market in "mom-and-pop stores that were doing shoe-box accounting" and realized that "for the cost of one extra clerk, they could have a computer system"—if he could find supporting software.

Green didn't look far. He buckled down to write a program of his own. His first effort was an "editor," a programming tool for Apple customers. That sold for $40 and helped support his longer-term project: a general accounting system that would retail at $4,000 for control program machines (CP/Ms) like the Altos and IBM PC. It took over two years to finish, and by 1979, Green was ready to start Software Dimensions with about $4,000 from his store's profits. All the tools he needed were at his disposal: He put his wife in charge of running the store and had two of his ComputerLand employees help program some of the machines on display in his shop. "I was sneaky," he admits, giving himself $10,000 credit to purchase his first two computers.

From the beginning, Green's prod-



Diamond Shamrock's Vice Chairman Avery Rush, President R. Tomlinson, and Bill Bricker, Chairman and CEO.

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— W. H. Bricker

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Ronnie Green of Software Dimensions
The second time the bankers didn't laugh.

ucts—the accounting packages for the CP/M and later a program adapted for the Apple that sells for $1,000—were packaged and marketed outside, through publisher Systems Plus. "Back then packaging consisted of a diskette with photocopied instructions in a baggie," says Green. But as the industry quickly evolved, Green itched for more control over the process. And that required capital.

By late 1981 Software Dimensions was yielding 22% pretax on its $500,000 revenues, which he plowed back into product development. So Green again went knocking at bankers' doors.

This time they didn't laugh. He walked away with a $500,000 line of credit, from which he drew $200,000 to pay taxes and hire a small marketing and sales staff.

Meanwhile, getting the money turned out to have been easier than luring experienced help. "We were a small development house in the big valley and couldn't compete with large companies for people," Green explains. So Green moved his outfit to Citrus Heights, a suburb of Sacramento, where he could pay his employees up to 10% less, since the cost of living was lower.

By the next fiscal year, ended June 1982, sales hit $2.2 million, with profits of about $480,000, which were also reinvested. "There are a lot of teenage millionaires in the Valley," muses Green. "But if you intend to be around next year, you have to dump a lot of that into R&D."

Green figured he would need an additional $2 million. Before he could decide between going public or seeking venture capital, Green was approached by ASK Computer Systems, a minicomputer software outfit looking for quick entry into the micro market. A deal valued at about $12 million is in the works.

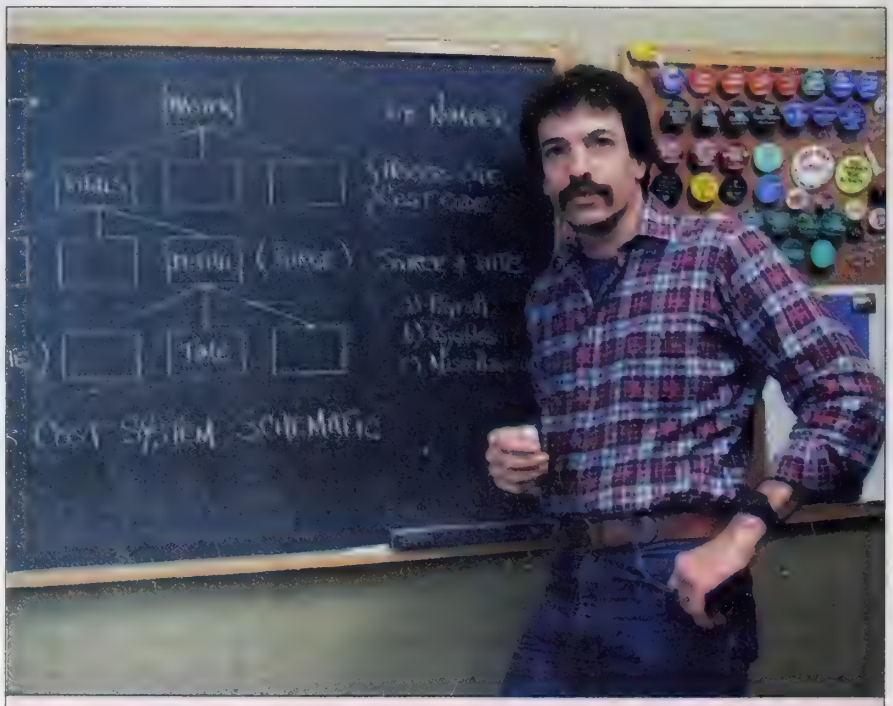
Now it is Green who is laughing. "No more hassles getting capital or going public," he says.

Odd job

Ensconced alone in his spacious Menlo Park, Calif. offices, R. Alan Carl, 37, contemplates his tiny software company, Automation Consultants. "One reason I started my own business is that I felt there is never a bad job market for an entrepreneur," he says.

After receiving a University of Chicago M.B.A., Carl worked his way up to assistant vice president at Wells Fargo's economics department doing statistical and economic work involving computers. Learning the equipment required developing some expertise in computers, so when Carl grew bored with banking, he and a partner each put up $1,000 for office supplies, and in 1976 started subcontracting as freelance programmers.

Carl and his partner soon had to bring in a staff of local college undergraduates to help keep up. The problem with that, he says, was that "it became difficult to control the quality when we weren't there ourselves. And profits kept eroding because installation required so much handholding." So the two decided to package (standardize) programs—also tough. Besides marketing and documentation, there was the problem of "getting businessmen spending $30,000 for a minicomputer to accept a packaged solution."



Automation Consultants' R. Alan Carl
"There's never a bad job market for an entrepreneur."

Carl also had difficulty convincing his partner not to take in venture capital. Amid the dispute, he bought out his partner in 1979. "That was the worst decision I've made yet," moans Carl. "We should have dissolved the partnership and split the assets."

Meanwhile, Carl had learned of a large gap in the software market: job costing systems for contractors—not just builders or programmers-for-rent like Carl but architects, landscapers, ad agencies and many others. He assigned development of a job-cost system on the Durango minicomputer to his cadre of programmers. By the time he was able to turn his attention to the program, he found it in serious trouble. "I yanked my staff off and finished the program myself in a month," he says. But that, in turn, hurt the neglected consulting side of his business. It wasn't long before Carl got behind in his payments to his ex-partner and had to sign over the rights to his job-costing package.

But Carl was saved by the new wave of microcomputers. He buckled down to adapt his original program—which ran only on larger minicomputers—for the new micros. It took nearly nine months of struggle, but in late 1981 he was ready—in time for a major computer trade show, where he met up with Peachtree publishers. "They liked it because our program was written in the same language as most of their other packages, because it was flexible enough to be used by so many different types of end-users without major modifications, and because it was deceptively simple."

Since Peachtree brought his program to market last November, they have been selling about 50 packages a month, for $1,000 each. Now that Peachtree has closed down its publishing, though, Carl will find other publishers. It's the only way to go, he says: "It's much better to have them market up to 1,000 copies a year and get my small cut. On my own I'd be lucky to sell 50 a year. They're going to earn their 80%."

Hail, Columbia

Wayne Erickson's MicroRIM Inc. may finally be on the brink of commercial success.

Erickson, 36, first developed his RIM (Relational Information Management) software for mainframes in 1977, while he was a programmer at Boeing's Computer Services division. It was later used by NASA to track the first space shuttle's errant ceramic tiles. But not without some false starts.

Wayne Erickson of MicroRIM
Good enough for the shuttle.

After Erickson and a Boeing colleague created their first prototype, their supervisors "smiled, but put it on a shelf somewhere." Other database software was available for large business applications, but, Erickson points out, nothing for the scientific field. RIM, he says, was programmed to "think like an engineer: to collect, organize and rearrange data in a more structured and flexible way." But Boeing, he says, didn't care.

Frustrated, Erickson left in 1979 to work at the University of Washington's computer center and enhance RIM on his own. Soon NASA, a Boeing client, approached Erickson. It needed RIM for its shuttle project. Erickson spent evenings and weekends over the next three months on the task. He was on to something.

He began to think about how to transpose RIM onto the new Heathkit personal computer he was building in his spare time. If that were possible, Erickson could endow a small computer with flexibility, speed and organizational power available then only with large systems.

Oddly, commercial possibilities didn't occur to Erickson until his older brother, Ron, an attorney whom the younger Erickson describes as "a wheeler-dealer type," convinced him that together they could take such a product to market.

So Erickson went back to the drawing board evenings and weekends, while Ron and an investment banker friend worked out the financial nitty-gritty. They formed MicroRIM in November 1981 with a $200,000 line of credit, which they and another board member they brought in had to personally guarantee. Erickson pared down his work at the university and quit the following year.

The first year brought in $360,000 revenues, with a loss of $200,000. But that did little to dampen some new investors' appetite for MicroRIM; they snapped up a $500,000 private stock offering last November.

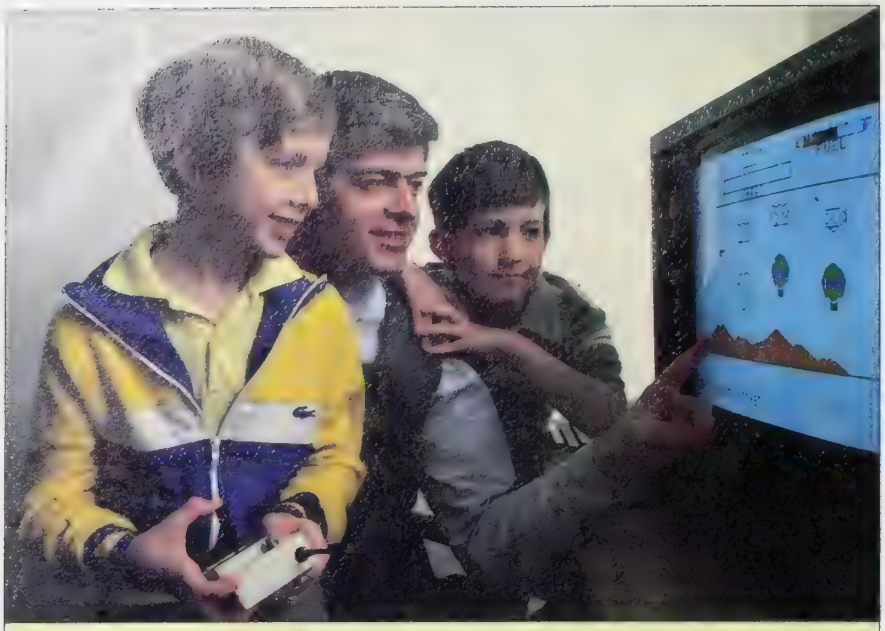
MicroRIM is still not out of the woods. It has yet to break even, and as the offering prospectus cautions: "The company is dependent on one software product. . . . The absence of adequate financing could have an adverse effect. . . . New products may render the company's product obsolete . . ." and, perhaps most ominous, "Computer software systems cannot be patented, and any copyright laws may not be meaningful." Meanwhile, though, in addition to the 1,500 copies of RIM that have been sold so far (it retails for $595 to $1,035, depending on which options are bought with it), the Coast Guard announced that it intends to buy 1,000 more to help track people and equipment. That should bring sales of $2 million to $3 million and propel MicroRIM into the black by this fall. And Wayne owns 40%.

Computer scholastics

Computers are dumb," says James Schuyler. True. Yet he started DesignWare in San Francisco three years ago to "teach" computers how to teach people.

Schuyler, 37, spent a lot of time in school himself. He worked his way through math and computer science degrees at Northwestern University as a computer consultant to some of his professors, mostly in programming, keypunching and writing for $3 an hour. By the time he had earned his Ph.D., Schuyler had started Sky Enterprises and employed six students to help him.

After graduation, Schuyler taught at Northwestern's school of education for a few years, "But once I got bitten by the entrepreneurial bug it was hard to shake," he says. By 1980 he had scrounged up $20,000 to get DesignWare's first computer courseware program off the ground.



DesignWare's James Schuyler and friends
Using helicopters to spell, computers to teach.

He bought about $10,000 worth of computers and split the rest of the money between office supplies and travel. By May he negotiated his first deal, to develop Computer Discovery, an electronic course on the history, programming and social impact of computers. It became part of Apple's Appleseed program, a giveaway to schools that purchased its computers. It has since been republished for over half a dozen other machines.

DesignWare was immediately profitable, generating 10% aftertax on $200,000 revenues its first year, which Schuyler plowed back into the company. Since then he and his now dozen or so programmers have continued to write educational software, mostly for schools. He depends on the likes of Harcourt Brace Jovanovich, Harper & Row and textbook publisher D.C. Heath to publish, market and distribute his dozen or so programs. Most classroom packages, retailing for about $175, include several diskettes and 20 or 30 workbooks.

Last November Schuyler turned over about a third of his company to venture capitalists for $300,000 in order to develop a new line of consumer educational/game programs, which he plans to publish, market and distribute himself. Among them: Spellicopter, a spelling game geared to ages 5 to 12, where kids "fly" helicopters to pick up scrambled letters in order to spell a word.

While Schuyler still owns about a third of his company (outside investors own another third and other insiders the rest), he foresees further diluting of his share with a second round of venture capital. Another entrepreneur bites the dust? "That's what you have to do to cash in on your investment," shrugs Schuyler, shirtsleeves rolled up. "By the time I cash out on this I expect the company to be doing $20 million revenues, and my percentage will still be 15% to 20%. By 1986 or 1987 I expect to either go public or be acquired." Then what? "I plan to start a new company, something in the computer field but completely different. Now I have no idea what," he muses. "By then the industry will be completely changed."

Back to the dice table

When Adora Ku and Gary Duesterberg first met in 1975 while both were working in separate divisions of a university data processing department, they would send each other notes and arrange dates via their computer terminals. A year later they got married and in 1978 started Business Software House, Inc., which cleared almost 30% profits on $150,000 last year, up 50% from 1981.

Ku, 32, has the presidential post, while her husband, 34, takes second billing and does most of the software design and development. "I'm the one with the administrative background," Ku explains. The two still use their computers to set up social and business schedules, but now they use Personal Calendar, their first packaged software program.

Personal Calendar communicates schedules between people, schedules meetings or use of office space and equipment and analyzes employees' time. It can also track clients or patients who repeatedly cancel appointments and helps an executive break down billable time and "remember" appointments or important events.

As newlyweds, Ku and Duesterberg moved to Atlanta and a year later started consulting and designing custom application software for a minicomputer manufacturer, a local government agency and a construction company, among others. As business grew, they began to realize that "as a service-oriented business, we were limited by the number of hours in the day," says Duesterberg. With all the handholding that clients required, "when a customer called two times to learn how to operate his program, we lost money," adds Ku.

The idea of packaging or even reapplying custom programs was appealing but obstacle-ridden. For one thing, they lacked funds and experience for marketing and were unwilling to give up a major piece of the company to venture capitalists. Computer owners preferred custom-designed software. But the road was already being paved by early publishers of lower-cost, general-purpose packages.

One publisher, Peachtree Software, retained Ku and Duesterberg in 1979 to help develop inventory, general

Business Software's Duesterberg, Ku
Easy to get in, but hard to stay.

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America's Best Selling Van— Now First With 20 MPG!

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ledger and mailing list programs. "Then Peachtree tossed us some ideas it had for automating executive tasks and asked if we were interested in designing one," explains Ku. The calendar scheduling idea impressed them, and they went to work.

It took a year to design and develop Personal Calendar. Peachtree did the documentation (essentially, the instruction manual) and packaging and brought the software program to market last December. The package originally retailed for $375, but competitive pressures forced Peachtree to slash the price to $195. So far it has been selling about 1,000 copies a month. "It could even outsell VisiCalc," exults Duesterberg. Peachtree started selling it in April for the 16-bit IBM PC and is repackaging Personal Calendar for home use.

"It's easy to get into this business, but hard to stay in," notes Ku. "You can hit it with one product like a pet rock, but then you have to go back to the dice table."

That's where she and Duesterberg are now.

Off the A train

Edward Brayman has been writing software for microcomputers out of his small Manhattan apartment for about a year. Its furniture: several file cabinets that support a long tabletop on which is set up about $25,000 worth of personal computers—Apple II, Apple III, IBM PC, printer and Rolodexes of diskettes. No couch, a few cushions stashed beneath a corner card table and showing little wear. A spiral staircase rises to a loft bedroom whose terrace overlooks the rear of several city tenements.

It's quite a leap, though, from the straitened circumstances in which he wrote his first program, BisiGraph, a business graphics package just sold to USA Software. Before last year Brayman claims he spent eight months working by day on a computer at a friend's apartment and by night "sleeping around."

"I was so broke, I had no place to stay except the streets or subway. Mostly the A train. That was the cleanest."

In 1976 New Yorker Brayman dropped out of college six credits away from a joint B.A./M.A. degree in math. He got his first job as a programmer in Salt Lake City. "I told the guy I had experience that I didn't have." After a year he returned to New York, where he landed another programming job on Wall Street. In two years he had worked his way up to data processing manager by spending most of his spare time in the firm's library, teaching himself.

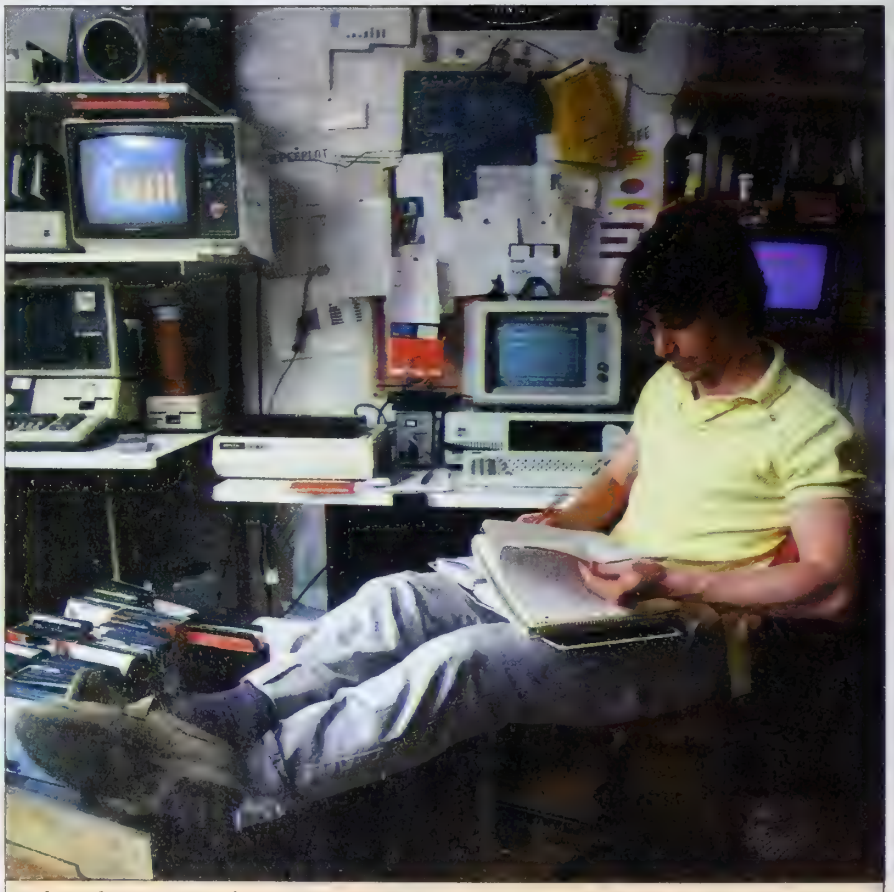
It wasn't long before Brayman got the itch to strike off on his own. "I saw the software out there, and I knew I could do a lot better," he says. At the time there was virtually none available for the then-new Apple III. Sacrificing a place to sleep, he quit to work full time on his business graphics program, using a friend's Apple computer. "Originally the package was done as a quickie, to make a couple dollars so I could get off the streets," he says. He let a computer store use it as a demo, where an Apple executive was impressed enough to put him in touch with the presidents of several software publishers, and he was on his way.

Brayman negotiated the USA Software contract for BisiGraph with the aid of a tax attorney with whom he had been bartering computer consulting services in exchange for legal advice. This was for a fee, though, which took up most of the development costs. Since he had access to his friend's Apple, Brayman's only other cost was disks, which run about $2 each in quantity. The final package fits on one disk, but Brayman used about 50 along the way.

The BisiGraph package will be released in a month or so and retail near $150. "It's hopefully one of the best business graphics packages out there," Brayman boasts. "It's the simplest to use. All my programs have the entire reference manual built into them. At any point in the program, you hit one key and it goes to the right page in the manual and tells you what to do."

He is now holed up in his office/apartment, working on an equipment tax-leasing program that he plans to market solo through his own new company, Useable Software, which Brayman says is backed by a partner who just left a $100,000-a-year Wall Street job to join him full time.

"We already have more than 20 companies interested in buying the leasing package," he gloats. "But to sell 1,000 disks will cost close to $100,000 in advertising and packaging. For now I'm pretty well set. I know where the money is coming from. In fact, by early next year, between the proceeds from BisiGraph and the leasing programs, I hope to be joining the millionaires' club." ■



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canadair challenger

If Gerry Roche calls, don't hang up, hear him out. This wooer of top-level talent may want you for a chief executive position.

Headhunter to the stars

By John A. Byrne

HIS BEATEN, brown leather briefcase in hand, Gerard Roche strides into the elevator at the New York headquarters of a multibillion-dollar corporation. "Oh, no," quips one senior executive, "here he is again."

Roche laughs. But after a session with the stern-faced chairman he is advised, "From now on, let's meet at the apartment."

A tall, polished man of 51, Roche's mere presence can trigger panic in executive suites. "I can't even go out to lunch with people publicly," he explains.

Don't get the wrong idea. These are just occupational hazards of being an executive recruiter—in Roche's case, the most successful wooer of top-level talent in the business. Even his competitors will tell you that. "He's a first-class professional," opines Russell Reynolds, chairman of the firm that bears his name. "The industry can use another 20 people like him."

In two head-hunting decades with Heidrick & Struggles, where he now serves as chairman, Roche has filled over 200 positions, more than one-quarter of them presidential slots. Among his prize catches: Thomas Vanderslice, who left General Electric to run GTE; Robert Frederick, another GE alumnus who is now president of RCA; and Edward Hennessy, who moved from United Technologies to take over at Allied Corp.

Roche's fee is typically one-third of a position's first-year cash compensation, which gives him annual income of perhaps $500,000. After luring Pepsi-Cola Co. President John Sculley to Apple Computer, for example, Roche's firm pocketed a cool third of a million, plus expenses.

What commands such fees is Roche's unusual ability as a personnel matchmaker. "Somebody said to me just the other day, 'Bring me another Sculley, I'm sure you have a list of them,'" Roche explains. "I said to myself, like hell I do. I have to go out there and scour the country again."

Most assignments, of course, don't begin that way. Roche's toughest challenge isn't finding potential job hunters; it is finding jobs that need filling and employers who trust him enough to assign the task to him. Says Roche: "You can't make rabbit stew without the rabbit."

That's why Roche spends at least one-third of his time developing business—much of it repeat assignments from the 900 or so corporations that have used the services of Heidrick & Struggles since 1980. One big advantage to using outside recruiters: A prospective employer can remain confidential and be highly specific in his demands without running afoul of antidiscrimination and equal employment rules. Former clients, incidentally, are off limits. Roche agrees not to steal an executive for two years after completing an assignment.

Once Roche lands an assignment, his search starts with a routine check with the firm's computer bank. It holds 50,000 "active" names, drawn largely from previous searches and contacts. A support staff of more than 100 performs updating and keeps track of daily executive changes.

Only rarely, however, does Roche's computer give a name he can recommend to a client. What it delivers instead are prospects who can be pumped for more names. Getting together an initial list of some 50 or 60 people is the easy part. "You don't have to worry about their age, education or span of responsibility," says Roche. "A machine can do that. The art of the matter is the ability to sit with a prospective chief executive and decide whether he'll fit with a strong-willed chairman."

Roche, through meetings with his client, eventually narrows his big list to three to five individuals with whom the prospective employer meets. Once the process gets this far, Roche claims an 85% success rate—even though many final-stage candidates say they aren't sure they want to make a move.

Enter Roche the salesman. He often has to persuade up-and-coming executives to jump ship. And even though his offers typically include at least 30% more money, getting someone to move is harder today than it once was. "During the Sixties, you could get anybody to go anywhere for another five or ten thousand bucks," says Roche. "Now it's hard to get good people away from the hearth, their boats, the garden club and where they like to play tennis."

In all of this, contacts are crucial. "There isn't anybody I meet who isn't a prospect, a candidate, a reference or a client," laughs Roche, "and all are tax-deductible." Often entire career plans are laid out on the dinner table or discussed over a round of golf. Roche regularly entertains at his Chappaqua, N.Y. home—informally, but always with a purpose. "He doesn't do anything lightly," says Michael Dingman, a Roche client who is

now president of The Signal Cos.

Matching up clients and candidates is tricky business. And Roche matches aren't always made in heaven. Maurice Valente, plucked from ITT, where he had been executive vice president, lasted less than half a year as the number two man at RCA. Arthur Taylor, snatched from International Paper, where he was chief financial officer and executive vice president, was let go four years later as president of CBS Inc. In both cases, though, RCA and CBS turned again to Roche to find replacements.

Those situations are particularly troubling for Roche. "A large corporation," he says, "can survive a mistake. An individual can't. I once put a 'hot ticket,' a wunderkind, in a fast-track corporation where he was soon ousted. He hasn't connected since, and he would probably be the president of a major American corporation today if he'd never met me."

But magic can work both ways. Roche, a University of Scranton graduate who earned an M.B.A. from New York University at night, was headhunted himself in 1963. Gardner Heidrick, who founded Chicago-based H&S 30 years ago, tried to entice Roche, then vice president of marketing for a Mobil division, to join Milprint, a Philip Morris unit in Milwaukee. But Roche wound up working in Heidrick's New York office.

Gerard Roche of Heidrick & Struggles
"Everyone I meet is a prospect, a candidate, a reference or a client."

"Early on, Gerry always went for the best three or four people in the country for a job," says Heidrick, 72, who left the firm last year to join his son in a new recruiting business.

Roche was named chief executive of H&S in 1978, but he refused to give up a full search load. That obviously didn't work, so he was appointed chairman two years ago. Since then, the firm has fallen on difficult times. In 1982 placements fell to an estimated 500, from about 600 the previous year. Professional staff, close to 100 two years ago, declined, to 82. Meanwhile, Russell Reynolds claims to have surpassed H&S in total billings to become the second-largest firm in the field—behind Korn/Ferry International. Revenues there probably reach $25 million to $30 million annually, roughly 50% above the figure at H&S.

Nonetheless, Roche's top-tier assignments seem immune from the recession. Part of the reason may be Roche's exceptional social skills, which he claims he picked up as a teenager serving shoppers at his father's corner grocery store in Scranton. With that in mind, Roche is now trying to prevent his son, a high school senior, from taking a summer job as a computer programmer. "I said, 'I will double whatever salary you can make if you do something that forces you to meet people—even if it's pumping gas or working at McDonald's.' "

Knowing how to work well with people, in fact, is Roche's idea of the single most important attribute for chief executives. "Most individuals fail or succeed on personal characteristics," he says. "Number one, above all else, is human sensitivity. You get the results of your efforts through other people, so you have to be able to identify, motivate, measure and compensate them."

Despite his recruiting skills, Roche insists that he tries to encourage corporations to fill positions from within. But he also points out that many corporations pay relatively little attention to grooming top-level personnel. "I often live off the carnage of failed management development programs," he explains. "The president of the company should help to develop his executive vice presidents, and he should be measured according to the successors he has developed. Lots of people don't do that. It's why I make my money." ■

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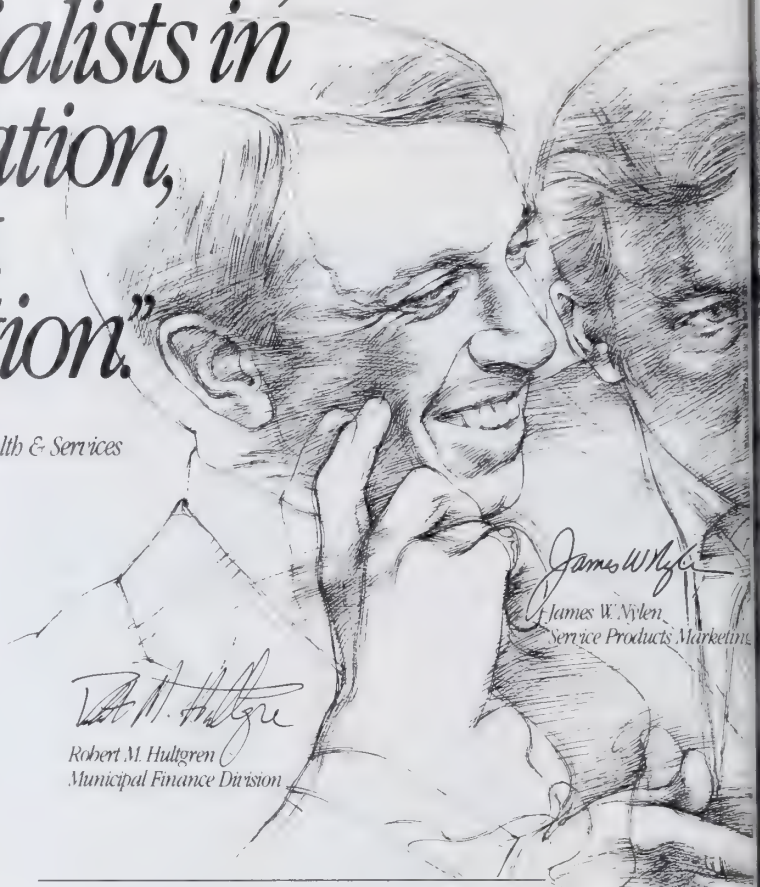

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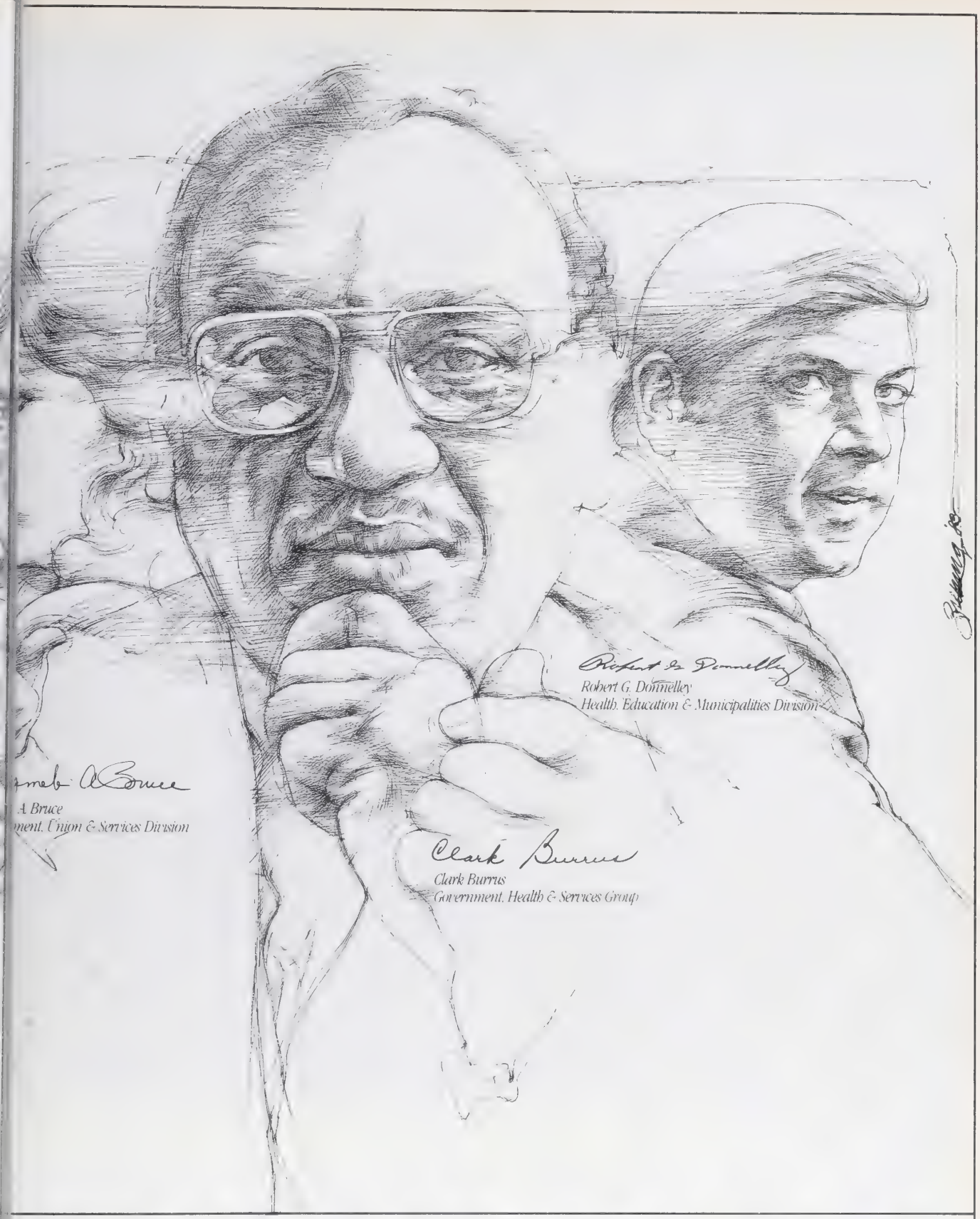
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ORK WORKS

Americans know remarkably little about this key friend, a nation of 84 million Muslims surrounded by such volatile neighbors as Afghanistan, Iran, China, the Soviet Union and, of course, India, from which it was carved in 1947.

Precariously poised...

An account of the Forbes Capitalist Tool team in Pakistan

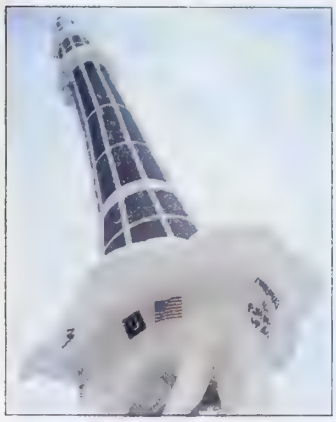
By Clifford D. May

IN THE SMALL, DARK HOURS of an early April morning, Malcolm Forbes and several members of the world's only international goodwill motorcycle gang found themselves disembarking from a Boeing 747 in Karachi, the populous Pakistani city on the shores of the Arabian Sea. The air was warm and humid, heavy with smells both sweet and acrid, odors of growth and of decay. As spotlights illuminated the wrinkles on their blue blazers and television cameras recorded the smiles on their drawn faces, they were led into a large room dominated by ornately patterned carpets, brass tables, carved wooden doors and crystal chandeliers.

A delegation of dignified gentlemen was there to greet them. Some of these men wore Western-style suits, some wore crisply tailored military uniforms, others wore baggy trousers and loose shirts extending to their knees, the traditional garb of the region. Tea and soft drinks were proffered as members of the local press corps posed their questions. Essentially, they boiled down to these: Why had this team come to Pakistan? What did they hope to accomplish? What was the meaning behind this not-very-grown-up passion for motorcycles and balloons?

Malcolm shook off his exhaustion and endeavored to explain. There's no better way to view a country than from atop a motorcycle, he said. On a motorcycle you don't just see the environment, you integrate with it. You feel the temperature change from mountain to valley. You smell the crops in the fields. You're alert to what's going on around you because motorcyclists who do not stay alert tend to have very short careers.

A monument to independence



As for balloons, he continued, that was how man first fulfilled the dream of flight 200 years ago this very year. And ballooning remains today the most beautiful, the most peaceful, the most gentle way to leave the earth. What better way to celebrate the bicentennial of ballooning than by introducing the sport to yet another country? At the conclusion of this trip, he said, a hot air balloon and all the equipment and training necessary would be provided so that Pakistani athletes could begin ballooning for fun and competition.

"This balloon, it is far too tall . . ."

Finally, Malcolm noted that Pakistan is a nation much admired in the West these days for the courage and strength it has shown in providing a haven for the continuing flood of refugees from the ugly war west of the border.

All that was accurate, of course, and it seemed to satisfy

our interrogators. But it also served to disguise the fact that, like most Americans, we really knew remarkably little about this country of 84 million precariously poised among such volatile neighbors as Afghanistan, Iran, the Soviet Union, China and, of course, India, from which Pakistan was carved in 1947 as a homeland for the subcontinent's Muslim population.

The position of this land within a vortex of struggle and change is more than just a current event: Alexander the Great fought his way into the territory, as did Timur the Lame and Genghis Khan. The British were here, and before them came the Moghuls; the Arabs invaded, and before them the Buddhists; Aryans lived here, too, and centuries prior to their arrival there was the Indus Valley civilization, a great and complex culture that flourished at a time when Europeans were still huddling in dank caves. Just the names on the map convey a sense of the region's exotic, intriguing past: the Punjab, the Sind, the Khyber Pass, the Valley of Swat, the Vale of Peshawar, the Karakorum, the Himalayas, Hunza.

It should also be revealed that the appearance of Malcolm and the Gang in Pakistan at this particular time had

At 240 feet, the Minar was the tallest balloon ever built, a huge sleeve of air with precious little lifting power. Its first flight—assuming it was capable of flight—would be in Pakistan.

come about thanks largely to another name, hardly less redolent of exoticism and intrigue. In Peking last autumn, near the conclusion of the Capitalist Tool motorcycle-and-balloon expedition through China *(see* FORBES, *Jan. 31)*, transnational industrialist Armand Hammer had introduced Malcolm Forbes to the visiting Pakistani leader, General Mohammad Zia ul-Haq. In the course of the conversation that followed, General Zia suggested that Malcolm might be interested in bringing his Harley-Davidson-and-hot-air-balloon caravan to Pakistan for another journey of exploration and adventure.

Malcolm eagerly accepted and, as a way of saying thanks, promised to build Pakistan a special gift balloon and to train a team of Pakistani athletes in its use. He approached the well-known British balloon-maker Don Cameron and asked him to construct an inflatable flying machine in the likeness of the Minar-e-Pakistan, the country's independence monument situated in the ancient city of Lahore. Cameron took Malcolm literally: The balloon he built was almost an exact replica of the Minar, itself a long, narrow structure, a sort of Asiatic version of the Eiffel Tower.

The dry season wasn't

At 240 feet, the Minar was the tallest balloon ever built, a huge sleeve of air with precious little lifting power. It was suggested that Malcolm and his team come to Pakistan in April, normally the driest month of the year. That meant there would not be time enough for Cameron to test the balloon before shipping it. The Minar's first flight—assuming it was capable of flight—would have to be in Pakistan.

One last unknown focused on how the Pakistani people would regard this group of hell-bent-for-leather Americans. After all, the country is officially known as the Islamic Republic of Pakistan. In the neighboring Islamic republic of Iran, Americans nowadays are held in about as much esteem as bubonic rodents. And only four years ago the American embassy in the Pakistani capital of Islamabad was stormed by a furious mob, incensed over reports—which turned out to be erroneous—that Washington had been involved in the seizure of the Grand Mosque in Mecca. Perhaps times and attitudes had changed since then. Perhaps not.

The team Malcolm assembled for the expedition was composed of many of the same hard-driving motorcyclists that had crossed China in the fall. There was son Timothy, a documentary filmmaker (whose newlywed wife, Anne, understood the priorities that dictated that they spend their honeymoon half a world apart). There was Dennis Fleck, director of the Balloon Ascension Division of Forbes Inc., and Kip Cleland, the magazine's director of physical fitness.

Two team members who had not been along for the ride in China were James Summers, a 23-year-old ex-Green Beret who served as Malcolm's bodyguard and personal assistant, and Barry Coleman, a British journalist who has long specialized in just about every aspect of motorcycling.

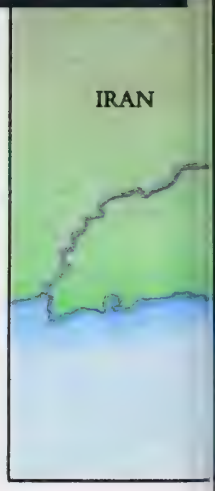
Finally, there was me, a veteran of the Long Ride in China, an incurable motorcylist and itinerant journalist on a busman's holiday.

Malcolm was understandably anxious to find out whether his great balloon was or was not a white elephant. So just hours after the press conference, the pale light of dawn found us moving through the hectic streets of Karachi en route to the old horse race grounds where we hoped to inaugurate the Minar later in the day. A city of nearly 4 million and the commercial center of the country, Karachi seemed a confusing welter of modern office buildings and cinder-block slums, browning palm trees and graying billboards inscribed with such slogans as: "Yummy Ice Cream—It's the Yummiest" and "Eagle Is the Best, Beats the Rest."

Toyotas and Mercedes-Benzes weaved through columns of motorized rickshaws, donkey carts and heavily burdened camels wearing bells on their knees and haughty expressions on their snouts.

By the time we returned to the racecourse after lunch it was already packed with several thousand spectators, all eager to see the historic first flight of the world's biggest balloon. A breeze was beginning to "freshen," as Malcolm put it, and Denny was harboring doubts about whether the launching should be attempted unless it died down. But Malcolm was determined to give it a shot.

MSF at 50mph: something of an endurance test



The long tube was laid out on the dusty ground, and two motorized fans filled it with air. That done, Malcolm climbed into the overturned gondola and hit the trigger on the propane burner, tickling the throat of the balloon with long feathers of flame. Nothing happened. Then, very slowly, the balloon began to rise. Or rather, half of it did: The end far from the flame was not hot enough; it remained hovering just above the ground so that the balloon ascended

with a crick in the middle, a bend that soon developed into a full right angle, giving the balloon the appearance of a great broken finger.

The wind gathered force and, as it did, hope that the Minar might straighten up and fly right vanished. Not this afternoon, anyway. Disappointment etched into his face, Malcolm called for the Minar's deflation and, at the same time, he ordered the crew to lay out a second balloon brought along as a backup: the ten-year-old Dream of Flight, a conventionally shaped balloon lavishly illustrated with figures from Greek mythology that are associated with flying.

The Dream of Flight balloon inflated quickly as the crowd applauded in approval. But then the wind strengthened further, so much so that the balloon began to strain against its single tether. Malcolm decided against attempting a free flight. Instead, he executed a swift and rough descent smack on top of the Minar.

The crowd seemed amused by the performance. "Well, it was a small failure, but at least you tried," one man told me. Another spectator, identifying himself as an engineer, suggested that the only way we would ever be able to raise the ungainly Minar would be by attaching another balloon to its nose and raising that section first. "This balloon, it is far too tall," he explained. "It is the law of physics. With that shape it is not going to fly without help."

Jim Summers, Barry Coleman, Tim Forbes, Kip Cleland, Denny Fleck, MSF, Cliff May

We rose early on Wednesday morning eager to begin the first leg of our overland trip, heading northwest through the vast Sind desert. Following after our motorcycle caravan in a minibus were three Pakistanis who would soon become our friends as well as our guides. There was Zakir Hussain Syed—we called him Zach—representing the Ministry of Tourism, a large man, as genial as a favorite

The road was crowded with camels and donkeys and Pakistani buses decorated with such disconcerting slogans as: "Ask forgiveness for your sins; this could be your final journey."

uncle, an efficient but never officious organizer who managed to retain his unruffled, debonair bearing under the most harrying of conditions. There was Lieutenant Colonel Mohammad Akram Khan, a true officer and gentleman, wiry and stoic, a born leader whom any one of us would have willingly followed into battle. An instructor in "physical training and mountain warfare," the colonel represented the "Adventure Foundation (Pakistan)," a nonprofit organization in the Outward Bound tradition and the outfit that would be undertaking to spread the gospel of ballooning after Malcolm's departure. Finally, there was Muhammad Nadeem Anwar, a bright and amiable 23-year-old engineer and aspiring balloonist, also a member of the Adventure Foundation.

Expecting a long morning ride through arid countryside, I applied a goodly coating of gooey sunscreen to my face. And predictably enough, by 7:30 the rain had begun, a steady downpour that quickly coated the roads with a thick film of oil, mud and water. The only sights for us to enjoy were the patterns formed by the raindrops on our visors.

The sun reemerged from behind the clouds as we were passing the city of Hyderabad. A green pickup truck containing a contingent of police escorts joined us and led the way. Standing in the flatbed, the policemen waved the oncoming trucks, buses, cars and carts to one side or the other, helping to speed us along our route. They were a friendly, jovial bunch, these Pakistani policemen, and they seemed to be enjoying the break from their routine.

They had been riding with us for only about 45 minutes when the accident occurred. From my place near the end of the line of motorcycles, I couldn't see it happen, but I did hear the sound of the impact, and I soon saw the bus

Escort into Lodhran

sliding to a halt on the shoulder of the road. The driver of the bus had seen the police too late and had hit his brakes too hard on a stretch of pavement littered with squashed oranges. The bus had skidded and sideswiped the pickup.

By the time we dismounted from our bikes, the three policemen were on their backs by the curbside, pained and glassy looks in their eyes. Our Pakistani colleagues helped them remove their shoes and loosen their collars. Before long, an ambulance arrived to collect them.

Their injuries turned out to be less serious than we had feared. One policeman had broken his arm; the others were merely bruised and in shock. But it was an inauspicious start to the journey, and it left us all feeling nervous and vulnerable.

As the hours wore on, the air became increasingly dry and hot. The road was narrow and crowded with camels and donkeys and the now familiar Pakistani buses, with both passengers and luggage piled on the roof, and garishly decorated with hammered metal, cartoon drawings of fighter planes and ocean liners and such disconcerting slogans as: "Ask forgiveness for your sins; this could be your final journey."

Even more ornate were the Pakistani trucks, nearly all of which had been customized with oversized cabs crowned by blunt prows and with a colorful mosaic of paintings paneling their sides. The paintings fell into four categories: those depicting beauty, usually in the form of a pretty girl; those that signified power, generally symbolized by a wild animal such as a tiger; those representing nature, for example, a landscape; and occasionally a tribute to a leader, a portrait of General Zia, for instance. The gaudier the truck or bus, evidently, the more business it attracts.

With so much traffic to contend with, our progress was frustratingly slow. Perhaps it was impatience, perhaps it was just bad luck that caused the second accident of the day. But as we entered a village around 4 o'clock, a small but stout donkey leapt into the path of Jim's bike and the two collided with a painful, percussive thud. Jim skidded off into the dust, barely managing to keep his heavy bike from tumbling over. As for the donkey, he stumbled off morosely, apparently planning to survive.

. . . not what they appeared to be

By the time we reached the Inter Pak Inn, a rest house by a reservoir outside Sukkur where we were to pass the night, we had been on the road for a full 12 hours. Yet in that time we had covered only about 300 miles. I could hardly stay awake through dinner and retired to my room immediately afterward. Sleep came quickly and it lasted until the cock's crow just before dawn.

At 9 o'clock we had already been on the road for several hours and were entering the Punjab, the biggest and most populated of Pakistan's provinces. Punjab means "land of five rivers," and as we moved northward the extensively irrigated land grew gradually greener.

The dwellings we passed were simple, mostly made of sun-dried mud or adobe. They blended so completely with the ground beneath them that they seemed to be growing directly from the soil. The people who lived in these huts were poor, but it was poverty of a kind they have endured for generations. Certainly, they did not appear to be starving or desperate. And they seemed to find us diverting. They waved, smiled and applauded as we passed and approached us curiously whenever we would stop.

In every hardscrabble village, the most colorful structure was invariably the mosque, many of which had powerful public-address systems attached to the highest mina-

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What appeared to be a group of scantily clad women emerged from the crowd and began to undulate provocatively to the music. In fact, they were young boys dressed as women.

rets. Each village also had its bazaar, a row of rectangular, frontless shops, a bit like boxcars on a train.

By the time we stopped near Bahawalpur in the early afternoon my face was black with dust and the corpses of countless mosquitoes and other creatures of possible entomological interest. We went to a rest house to wash and then to a room where our lunch was set out on what appeared to be a tablecloth with a floral design. On closer examination, it turned out that the cloth was only plain white linen on which delicate flower petals had been meticulously arranged.

We moved out immediately following the meal, and within just a few minutes came to Lodhran, a town of about 10,000, where we were asked to make an unscheduled stop. It seemed the villagers did not want our arrival to go uncelebrated. Garlands of fragrant wild roses were draped over our heads, and hot tea and cold soda were served. It was a pleasant and quite unexpected show of hospitality, and we appreciated it. Still, we had a long way to travel and were eager to get on.

". . . this could be your final journey"

But the festivities in our honor were not over yet. Waiting for us on the road out of town were two long parallel lines of pedal- and moped-powered rickshaws. Behind this cordon were hundreds of waving and cheering villagers.

We crept along on the motorcycles until we were stopped again, this time while a band of bagpipers and drummers performed in the road. Next, a white horse in a pink hat was introduced to us. It did a remarkable little dance. Then, what appeared to be a group of scantily clad women emerged from the crowd and began to undulate provocatively to the music.

This struck me as extremely peculiar. Islamic law is more than just strict where women and sex are concerned. We had hardly even seen a woman since our arrival in the country. There had been none at any of the receptions, meals or press conferences we had attended so far. Those women we passed while riding had been veiled from head to toe in accord with the dictates of purdah, the Muslim custom of total feminine modesty. Unlike the men and children, women did not generally smile or wave at us. Some even turned their backs until we had passed. When we watched television in our hotel rooms, scenes containing even the most innocent suggestions of sex would routinely be blacked out by the censor. I recall, in particular, the screen going dark just after David Janssen proposed to Gena Rowlands in *Two-Minute Warning*.

Yet here was a group of women boldly flaunting their flesh for our amusement. Only as I inched closer on my motorcycle was I able to discern that, in fact, these seductive dancers were not women at all but rather young boys dressed up as women—traditional entertainers known as khusra dancers, as I was later to be told.

As we watched the show, villagers began to filter through the lines of vehicles to ask for an autograph or a shake of the hand. We tried to oblige, of course, but soon there were dozens of hands and pens and pieces of paper flapping like crazed birds in front of our faces. The temperature was pushing into the high 90s, and the sun beat down with relentless intensity. The heat from the idling motors added to the discomfort, while the moist, cloyingly sweet flowers hung like nooses around our necks.

As the crowd pressed closer and more insistently upon us, I found myself becoming dizzy and just a little uneasy. We knew that everyone here meant only to be friendly. But under conditions like these, crowds had been known to transform into mobs, and mobs sometimes lose control. Just when the heat and the pressure of the bodies was beginning to grow unbearable, a contingent of policemen stepped in wielding swagger sticks, forcing the multitude a safe distance away. A path was cleared down the center of the road, and we accelerated rapidly, feeling the relief of the wind in our faces again. The sky grew cloudy and soon a cool rain had begun to fall.

By 5 o'clock, we reached the driveway of the Hotel Sinbad in the city of Multan. We had been on the road for ten and a half hours, covering only slightly more ground than on Wednesday. Multan is known for its hot, dry climate, said to be the result of a curse cast upon the city by a saint who was flogged to death here centuries ago. But the curse had evidently been lifted for our visit; that evening it rained again as we went for a tour of Multan's ancient forts and domed mausoleums.

The metallic, melodic sound of muzzeins calling the faithful to prayer over loudspeakers woke us at 5 o'clock on Friday morning. The rain had continued throughout the night, and though the sky was now almost cloudless, the streets were still glassy as we rode out of town at dawn. I put on my full-face helmet to protect my skin from the inevitable reappearance of the searing spring sun. April was, after all, the height of the dry season. These unusual

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One might argue the veil represents an homage to feminine beauty. And if nothing else, it means a woman does not have to worry about looking her best every time she leaves the house.

rains, everyone kept telling us, couldn't continue.

We drove through the outskirts of the city, passing open stalls dimly illuminated by orange fires. In other shops rows of cola and orange soda bottles glinted like stained glass in the sunshine. The homey smell of bread wafted toward us. On wooden cots strung with hemp, turbaned men reclined, sipping steamy cups of pale tea and smoking hookahs. Others sat in chairs in the shade as barbers tended to their grooming. The beards of the younger men were soot black. The older men often wore bright orange whiskers, turned that color by liberal applications of henna. Veiled women moved in and out of the shadows, shadows themselves, it seemed.

Much has been written about the veil and what it implies regarding the status of women in the Islamic world. But perhaps one might also argue, if not entirely persuasively, that the veil represents an astonishing homage to feminine beauty. The implicit suggestion, after all, is that every woman possesses a physical power so overwhelming that for a man even to gaze upon it could be disastrous. Surely, too, there is something egalitarian in veiling all women, young and old, fat or slender, lovely or hideous. And if nothing else, the custom of purdah means a woman doesn't have to worry about looking her very best every time she leaves the house.

Floating toward Afghanistan

Watching the Dream of Flight

We rode northeast toward Lahore at a slow but steady clip until 8:30, when we came upon a line of several hundred trucks waiting to cross a flood-damaged dirt roadway. Only a single muddy lane was passable, so the trucks had to wait their turn, alternating with trucks coming the other way. With some difficulty, we managed to slowly squeeze by and cross the soggy, rutted road. The minibus and balloon truck were not able to get through so easily, so we had to leave them to catch up later.

It began to drizzle again at about 10 o'clock. Then came a brief shower of hail, and after that the rains grew steadily stronger. The road was covered with a thick coating of sickly yellow liquid. Depressions in the road became treacherous bogs. I was riding behind Malcolm, expecting that at any moment he would pull over to wait the rain out or to find out if there might not be another route over higher ground. But he continued on undaunted.

Up ahead I saw what appeared to be a swamp covering the road. Malcolm, for some reason, wasn't stopping or even slowing down, as far as I could tell. It occurred to me that he might not be paying attention, but Malcolm isn't that sort of rider. Then, to my amazement and horror, he drove straight into the water. I was almost expecting some variation on the biblical theme. Instead, his wheels half submerged, sending up a long, curving rooster tail of sludge. But he kept on going and came out the other side. Reluctantly, I followed.

Flooded sections of the road began to confront us with increasing frequency. I tried lifting my legs as I went through them, hoping to keep from becoming entirely drenched by the jaundice-colored muck. Soon enough I resigned myself to the fact that no combination of bodily contortions was going to keep me any cleaner or drier. Since the motorcycle I was riding had no windshield, the slop even flowed over my head. At least I had worn my full-face helmet as protection against the sun; without it I would have been eating the stuff as well.

The strain of this kind of riding was wearing on me, but, glancing at the odometer, I knew we would stop for fuel before long. I could then suggest we break for lunch and a little rest. Even just a short break would have been welcome. But, curiously, Malcolm continued to press on. Before long, I saw Tim switch to his reserve fuel tank and then pull over, out of gas. Malcolm didn't stop. Kip was the next to drop out. Malcolm kept going. As we entered Lahore and caught sight of the real Minar-e-Pakistan in the distance, Jim, too, ran out of gas and pulled over to wait for assistance from our escorts. Malcolm droned on. Finally, only Denny and I, both riding bikes with oversize gas tanks, were able to follow Malcolm—whose bike was equipped with a gas tank of only standard size. At last, I saw Malcolm switch to his reserve tank. Surely now, I thought, he'll stop at a gas station. He couldn't be hoping to make it all the way to the hotel without a stop.

But Malcolm persevered, riding, it seemed to me, more on will than on gasoline. I counted the miles until his reserve tank ran dry. When it did, he pulled the choke. It took me a few minutes to figure out his intention. Remarkable, I thought. He's trying to eke out a little more mileage by riding on fumes. He was. And what's more, it appeared he was going to win this little contest he had set up for himself: The hotel finally came into view. But not quite. There was a divider in the road and the turnaround was another 50 yards farther on. Right there, directly across from the hotel driveway on the wrong side of the divider, Malcolm's bike finally coasted to a halt.

". . . the mixture ignited explosively"

Within a few seconds two policemen arrived. They

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Consider our relationship with Power Systems Engineering, Inc. Then read on for other examples of how we tailor-make each financial package.

How GECC helped Power Systems make cold cash out of hot air

When GECC first scouted Power Systems, the small Texas company proposed to design, build, and operate a plant that would recover waste heat generated by a supplier of calcined coke. Calcined coke is a petroleum refinery by-product essential to the production of aluminum.

They would convert the heat energy (equivalent to some 2,000 barrels of oil a day) into steam and sell it to a major oil refinery, a large user of steam. As a bonus, Power Syste would generate enough electricity run its own heat recovery syster Any surplus would be sold to a lo utility.

If GECC had rated Power Sy tems on the basis of its credit wo thiness—the traditional bankir measurement—their balance she could not have justified the amou of credit necessary to build the plar

But GECC's reputation has n been made within the narrow halls orthodoxy.

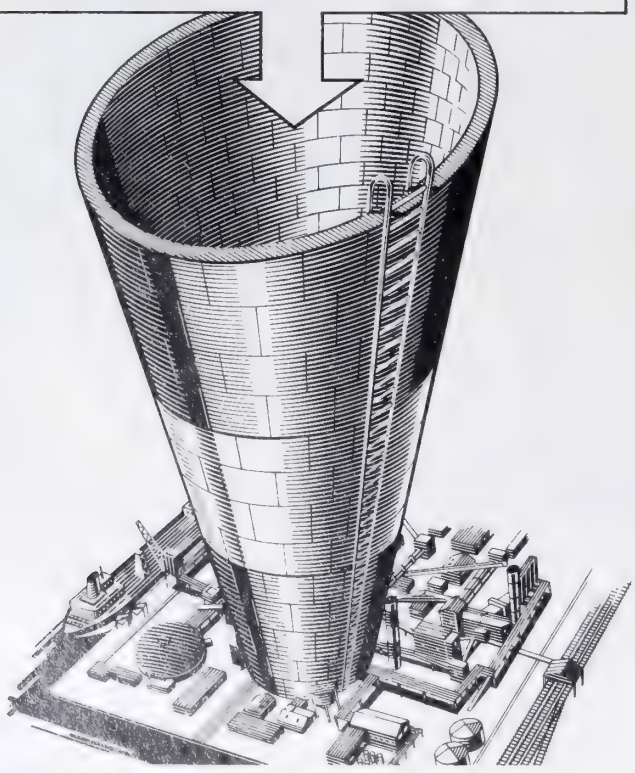
We did more than analyze Pow Systems' ability to repay the loan; w peered into the future to see how we the project would do based on i *long-term* contracts.

Was this technology sound ar dependable? Yes. Would their pricir structure provide sufficient cash flo to cover lease payments, even in ligh of oil and natural gas prices? Ye Would long-term demand for alum num survive the industry's curre difficulties due to the worldwic recession? Yes. Was an acceptab substitute for calcined coke in th aluminum electrolytic process likel to be discovered? No.

Satisfied, GECC created th package for Power Systems: 1) two-year $60 million loan to finan construction of the plant. 2) Upo completion, the loan, plus accrue interest, will be capitalized and co verted to a 10-year guideline lease.

A $70 million package in all for small company (at the moment) wit a blockbuster of an idea. What mo could any lender ask?

MONEY POURING OUT OF A SMOKESTACK: UNRETOUCHED PICTURE. To most observers, nothing appears to be coming out of this smokestack but waste heat. Power Systems Engineering saw the potential profit in converting heat into steam energy—and GECC saw the potential in Power Systems.



GECC helps U.S. Lines take the plunge into super container shipping

United States Lines, one of the olde U.S. flag ocean carriers, wanted t modernize its fleet by building co tainer ships so large and efficient th each one could carry cargo equiv lent to a 20-mile long freight train.

Consider the following, as GEC did, (and many other financi

PS THAT ONLY SAIL EAST may not be the d of big idea other financial institutions k for. But GECC's experts assessed U.S. es "Round-the-World" shipping concept the context of the worldwide container-p market and found it promising enough to create a $57 million debt package.

stitutions no doubt would have) not helping U.S. Lines finance e building of the ships.

here is a worldwide recession in ean shipping. No one can predict hen it will end.

Many other shipping companies ve large ships that are laid up, ing, useless to shippers and backers.

The choice Asia route market is minated by foreign shipping.

Bottom line: GECC helped range a financial package when any other institutions probably ould not have.

We were not naive. GECC's ipping experts went the extra knot nd scoured the sea (and the land, o, in USL's case) for *positive* fac-rs. Here is some of what we found:

As much as two-thirds of the acific basin—and the remainder of e seas for that matter—were up for abs if the carrier was creative and ggressive.

GECC believed U.S. Lines was oth. To begin with they had an traordinary idea: their new Econ-ips, the super container vessels, ould sail eastward around the orld in a continuous string. Each ip would make predetermined calls 12 ports, calling at each port one eek after the last ship had departed.

This would virtually eliminate e problem of light freight backhaul.

We commissioned a recognized aval architect to check the sound-ess of the Econship's design. And e contract with the ship builder as judged by us to be sound.

We were impressed that the ompany had an efficient land link etween its customers and shipping orts worldwide—the carrier owns or ontrols 28,000 containers and 12,000 hassis.

GECC approved a $57 million subordinated loan for U.S. Lines.

This financing has made American shipping in general more competitive with foreign shipping. The new cargo ships are more efficient, and therefore reduce cargo carrying costs. Result: more business for U.S. shipping companies, more dollars stay at home.

How GECC retail credit helps small stores get big and big stores become nationwide chains

GECC finances over $1 billion in consumer credit receivables for more than 7,000 retailers throughout the country.

Our first objective for every retailer, regardless of its size and the merchandise it sells, is the same: *slash* the turn-around time on credit judgment.

If their present credit system takes days, we want to do it in hours; if it takes hours, we aim for minutes!

Our competitors probably think we're compulsive. But we never forget this elementary piece of salesmanship: Tell a prospective customer you're able to run a credit check on the spot and there's a good chance that customer isn't going to leave before you close the deal.

Two cases in point: Lowe's, the nation's largest retailer of lumber and building material products, and the fledgling Signature J clothing store.

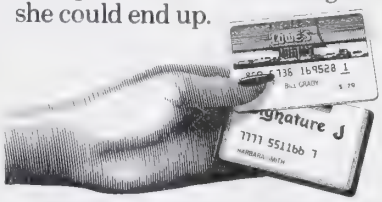
Lowe's has 235 stores located in 19 states. In fiscal 1982, total sales exceeded $1 billion. Of that, $570 million was in retail consumer sales; $75 million was in credit card sales serviced by GECC.

GECC's relationship with Lowe's goes back to 1959. But it was in 1979—when they initiated and we began working with them on a private label credit card—that our mutual business really took off.

That first year, GECC processed 505 new credit card applications a day.

Today, GECC services over 525,000 credit card customers for Lowe's—and credit judgment time has been dramatically slashed.

Signature J is another story—now—but if the plucky woman who has owned the women's wear specialty store in Albuquerque since the beginning of 1981 keeps up her current pace there's no telling how big she could end up.



GECC services over 1.8 million credit card customers for 297 retailers—at last count.

That was not always so. Kajean Miller had no prior retailing experience. Her first try nearly failed. Once she got the business off the ground, she was confronted with a recession.

But Kajean stuck in there. She got a loan from the Small Business Administration. And she introduced GECC's credit card to her customers.

Within six months, her charge accounts doubled to 600. She expects a 10% increase in business this year.

Bill Grady of Lowe's, has said, "We chose GECC because they were willing to completely customize a program to fit our needs."

We believe Kajean Miller and our other retailers would agree.

To find out how we do it, mail the coupon. Or call 800-243-2222. In Connecticut, call 800-942-2222. Thank you.

Marketing Programs Operation
General Electric Credit Corp.
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General Electric Credit CORPORATION

F 620

Creating Money for Business

The Minar, now straight and tall, inclined like the Leaning Tower of Pisa. Still, it was working. The world's tallest balloon was flying, and Malcolm was suspended exuberantly beneath it.

gripped the motorcycle from behind and, with Malcolm still sitting tall in the saddle, pushed him to the turnaround and back down the road to the hotel driveway. It was an image I'll not soon forget: Malcolm, aided by his two uniformed assistants, rolling toward the elegant Intercontinental Hotel entrance, a hoodlum maharajah wearing soaking wet leather and a dignified mien.

"So close," Malcolm mumbled as the distressed hotel reception committee shook his dripping hand. "I was there. If it wasn't for that divider I would have made it."

Waking at five on Saturday morning, I looked out the window to see clear skies and the leaves on the trees motionless—perfect weather for flying balloons. I felt a sense of relief. My guess was that Malcolm's grim display of determination on the way to Lahore yesterday stemmed, at least in part, from our inability to raise the Minar in Karachi and concern that we would not be able to raise it anywhere else.

Local newspapers had written of our "failure," and polite but vaguely condescending officials had been telling us how sorry they had been to hear that we "were not very successful." One thing seemed certain: This trip, which had already become something of an endurance test, was likely to become a lot more trying if the weather did not clear and the Minar did not rise pretty soon.

We drove by bus to the Qaddafi Stadium, named for the mercurial Libyan leader, where a crowd of several thousand had already begun to gather. "Well, if the Minar doesn't get up here, we can blame it on Qaddafi," Malcolm quipped. We all chuckled, a little tensely.

There's something egalitarian about purdah

The balloon was laid out as it had been in Karachi, and the fans were switched on. The weather still seemed to be all right, but the central problem remained: how to get the hot air to the far end of the balloon, 230 feet away from the source of heat. Denny had an idea. He and Malcolm took a propane tank and a burner and walked directly into the interior of the balloon. They came back out as far toward the end as they could and cooked the air there, then slowly backtracked, spraying fire as they went. Malcolm climbed into the gondola for the final blasts of heat.

The balloon rose slightly, still parallel to the ground. It wriggled awkwardly as it tried to rise, but it appeared that it was not yet able to do so. As Malcolm manned the burner, fire sprinkled over the balloon's nylon skirt, making Swiss cheese of it.

But slowly, very slowly, the Minar was beginning to ascend. Again, that awkward bend appeared in the center, making the balloon look more like a sloppily handled tube of toothpaste than a national monument. Then, within no more than two or three seconds, the balloon majestically straightened and floated skyward. Applause exploded from the audience as the balloon rose higher, taking the gondola, with Malcolm in it, off the ground. In triumph, he waved to the crowd. A feeble breeze began to blow, and the Minar, now straight and tall, inclined like the Leaning Tower of Pisa. Still, it was working—the world's tallest balloon was flying—and Malcolm was suspended exuberantly beneath it.

With uncharacteristic prudence, he decided not to untie the tethers. Instead he quickly came back down to earth, then erected the Dream of Flight and took off with Denny and a shaky Pakistani television cameraman for a brief free flight in that.

"Our effort to salute Pakistan was successful," a much relieved Malcolm later told a radio interviewer. "The Minar has been raised in its home city."

By noon a much more relaxed motorcycle gang was on the road once more, traveling northwest toward the twin cities of Rawalpindi and Islamabad. Though pewter clouds appeared in the distant sky, for the most part they held their moisture. The land was becoming more fertile, and the geography began to grow more interesting, the road twisting through a corrugated landscape of green and brown hills. When we reached Rawalpindi toward late afternoon, the odometer on my motorcycle indicated that we had covered a distance of 975 miles since our journey began on the previous Tuesday.

Backed up by the fliers of mythology

We rose at 5:00 on Sunday and, over breakfast, read about ourselves in the *Pakistan Times*. The article reported that the Minar had been inflated and that the Dream of Flight had flown. "Mr. Forbes felt elated at the success of both ventures after his failures in Karachi and said he was glad not to have disappointed the people of Lahore," the article concluded.

But not content to let us rest on his laurels, Malcolm planned to fly the balloons again today, so by 6:45 we were off for the Rawalpindi racecourse.

Denny used the same method to inflate the Minar as he had in Lahore. In addition, extra nitrogen was added to the propane in the gondola's tank in an attempt to project the flames still deeper into the balloon. But when the Minar was inflated and Malcolm hit the trigger, the nitrogen-rich mixture ignited explosively, spitting a wide arc of fire across the already perforated skirt of the balloon. Under such intense heat, the material began simply to melt away. To make matters worse, after the balloon began to rise, the locally hired crew didn't hear the signal to release the ropes holding down the far end. As a consequence, the Minar jackknifed again, and only after several suspenseful minutes did it manage to unfold.

Malcolm rose briefly into the air, acknowledged the applause of the crowd, then set down and ordered the Minar deflated. Clouds filled the sky, and the rain began to fall once more. The crowd scattered while we hastily packed up and returned to the hotel.

We left Rawalpindi at 1:30, passing through mostly barren landscape, crossing the silty Indus River and enter-

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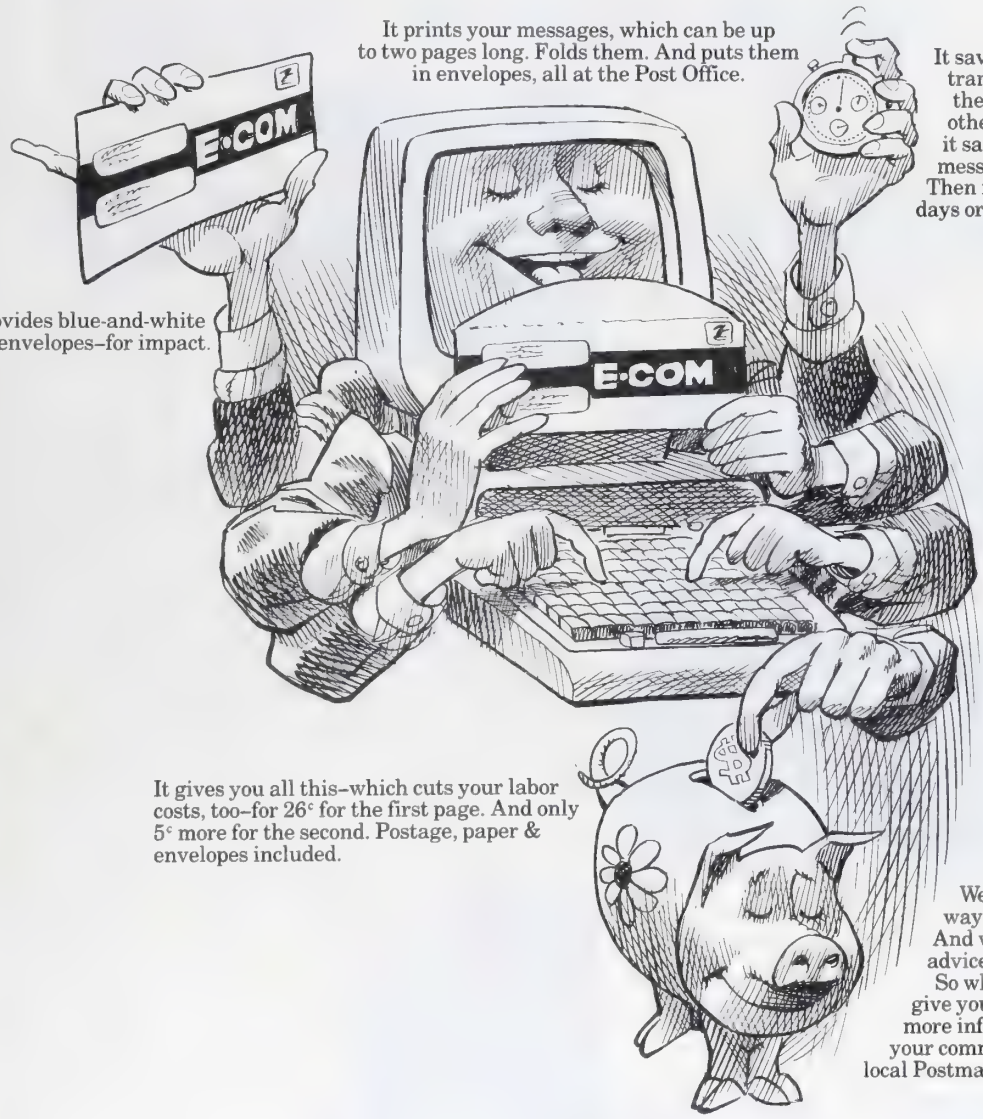

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The tribal leader's words may have been incomprehensible, but his meaning was not difficult to divine: We were not supposed to have passed the Gate to the Khyber Pass.

ing the North West Frontier Province early in the afternoon. Along the roadsides and by the riverbanks we began to see the squalid camps of the Afghan refugees. Bearded men with disheveled turbans piled atop their heads squatted in the dust in front of tents stamped with UNHCR (for United Nations High Commissioner for Refugees) while veiled women tended black iron pots suspended over smoky fires. "Soviets Out of Afghanistan" I saw scrawled across a plastered wall.

More than 3 million refugees have now crossed the border from Afghanistan into Pakistan. Some are guerrillas who remain only long enough to rest, recuperate and attempt to obtain additional arms and ammunition. Many others have no plans to return to their ravaged homeland. Because of close ethnic and linguistic links with the local population, the refugees tend to find easy acceptance in the region. But the sheer weight of their numbers has put tremendous pressure on meager water resources and sharply increased competition for scarce employment.

Late in the afternoon, as a light rain was falling, we reached our hotel in the 2,000-year-old city of Peshawar, capital of the North West Frontier Province, and centuries ago an important stop on the great trade routes from Persia, China and Turkistan.

Through the Gate to the Khyber Pass

Early Monday morning we set off for the Peshawar Stadium. Yet another "balloon demonstration" was on the schedule. Malcolm explained to the crowd that the Minar would not be inflated, however; it would be returning to England for repairs and modifications. Then, with Denny and an English newspaper photographer accompanying him in the Dream of Flight, Malcolm took off for a long flight over the quiet countryside.

As afternoon approached we left Peshawar for the Khyber Pass leading to Afghanistan, a rugged road between the mountains where more than a century ago the soldiers of Victorian Britain waged bloody battles against fierce Pathan warriors whose way of life remains largely unchanged even today. The Khyber Pass lies in what is known as the tribal belt, a region still ruled by local chiefs free of effective government control. The tribal belt remains as wild and unconquered as any corner of the earth today. And for most of the past six months, two of the local Pathan tribes had been warring, reportedly over control of the opium trade. Under such conditions, we were told, travel in the area could be hazardous.

Not far outside Peshawar, a pickup truck containing eight Pakistani soldiers armed with automatic rifles and another manning an MG 42 machine gun joined our caravan. This military escort accompanied us to the town of Jamrud, a lone government outpost within the tribal area and the last town before the Bab-e-Khyber, the Gate to the Khyber Pass. As we stopped for fuel a crowd of men gathered. Most wore large turbans and coarse blankets and had rifles slung casually over their shoulders; in the tribal territory almost every male is armed at all times.

We proceeded to the gate and waited for our escorts to take the lead. But they were nowhere to be seen. Malcolm decided to proceed without them. We began our descent down the winding road. We had traveled no more than two or three miles when a Suzuki pickup containing three armed men came charging up from behind. It swerved in front of Malcolm and forced him to a halt.

The meaning was clear

The leader, menacingly wielding what Jim later identified as a Chinese-made version of an AK-47, shouted at Malcolm in a language that was probably Pushtu. The other two men, both carrying Enfield .303 carbines and wearing bandoliers, watched from the flatbed of the truck.

The leader's words may have been incomprehensible, but his meaning was not difficult to divine: We were not supposed to have passed the gate, and we were to turn back immediately. Malcolm didn't argue for a moment. Though not a man who takes no for an answer easily, Malcolm's experiences in World War II and New York City have evidently impressed upon him the virtue of showing courtesy to strangers bearing automatic weapons. Later, we were to learn that these persuasive gentlemen were informal representatives of the local constabulary. A journey through the pass could not be risked at this time, it had been decided; our demise might tarnish the image of the neighborhood.

I was still thinking about these events later that afternoon when the death occurred. As happens not infrequently when riding a motorcycle in the countryside, a bird flew into my path, its white wings flapping wildly in the air ahead. (I was reminded of the birdlike profusion of papers that had waved in my face in Lodhran earlier.) I slowed sharply to give it time to maneuver out of my way as birds normally manage to do. But for some reason the animal panicked and headed directly for me. Before I could react, I saw the beak pointing toward my eye. Luckily for me, the visor on my helmet was

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As seasoned motorcyclists we knew better than to complain about any trip we could walk away from. And the world's tallest balloon at least reached the sky as it was intended to do.

down. The bird's luck, however, had run out. My head snapped back as it hit with a heavy smack. Blood splattered across my helmet. "You got him," said Denny, driving up from behind.

Just minutes later, Malcolm found himself in a far more frightening situation. As he came around a turn, a small child darted into the road in front of him. Malcolm slammed his brakes and went into a skid, barely missing the child and narrowly avoiding a spill as his back wheel slid out to the right.

We reached the town of Abbottabad, in the foothills of the Himalayas, by 5 o'clock. A precipitous road took us to a mountaintop rest house, a lovely colonial cottage with a view of the snowcapped mountains. As darkness fell, a low, solemn drone rose from the dwellings scattered in the valley below, a mournful, discordant dirge, the sound of faithful Muslims raising their voices in prayer.

Zia joins the Forbes Capitalist Tools

The rains began again early Tuesday morning. The newspapers called them "torrential" and reported that a more rainy April in Pakistan could not be recalled. One consequence was that mud and rock slides had begun to occur along the mountain road to our north. With unusual prudence, Malcolm decided that we would go no further by motorcycle.

Instead, we proceeded by car, accompanied by Brigadier Jan Nadir Khan, the intelligent and dignified president of the Adventure Foundation. The route took us to the first stretches of the famous Karakorum Highway (KKH), the two-lane road that connects Pakistan with China, along an agonizingly twisting route through four of the world's great mountain ranges: the Karakorums, the Himalayas, the Hindu Kush and the Pamir. The KKH, which was completed only in 1979, took 20 years to build. Thousands of Pakistanis and Chinese took part in the mammoth construction. Hundreds of them were killed in landslides and accidents before the project was finished.

We returned to Abbottabad in the late afternoon and immediately packed up to begin the final ride back to Rawalpindi. The rain was coming down harder, and the road looked slippery. I was particularly nervous about the journey since the motorcycle I had been riding had no windshield or crashbar and the headlight and horn had both ceased working long ago.

As we left Abbottabad I saw a billboard that seemed to articulate my fears. It read: "Life Is Uncertain." (The tag line went: "Life Insurance Is Certain.")

Any chance of getting back to Rawalpindi before dark was lost around 6 o'clock when Malcolm's bike rolled to a halt. It turned out that a line from the gas tank had come loose and his fuel had spilled onto the road. Denny took a small piece of wire and managed to use it to reattach the line. Malcolm then switched to his reserve fuel tank and we were able to continue on.

As darkness fell, Jim "cradled" me, as he put it, running interference for me against the oncoming traffic while I stayed behind him and as close as possible to the road's edge. I couldn't see much through my rain-washed visor. I simply followed the red taillight on Jim's bike and that on Malcolm's further ahead. When the red lights became bigger, I slowed down; when they became smaller, I sped up. When they jumped, I prepared for a bump. I felt as if I were playing some video arcade game rather than riding a motorcycle. Every so often I had to raise my visor to allow the cool, wet air to break the hypnotic spell.

Finally, around 7:30 we rolled into the safety of the hotel driveway in Rawalpindi. According to my odometer we had covered nearly 1,300 miles of rainy road since first firing up the engines in Karachi a week before.

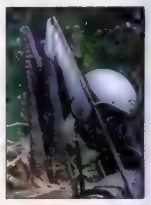
We did not ride the motorcycles or launch the balloons again in Pakistan. On Wednesday we dressed in coats and ties and went by minibus to nearby Islamabad for a reception with General Zia. Malcolm presented him with one of our motorcycle vests, which he gamely donned. The general, in turn, awarded Malcolm Pakistan's "Pride of Performance" medal. "The honors you least deserve, you most appreciate," Malcolm noted.

Malcolm also promised, in addition to repairing and modifying the Minar balloon, to build a conventionally shaped balloon for Pakistan, one that could be used in competition. And he reiterated his pledge to bring a team of athletes from the Adventure Foundation to the United States to be trained in its operation and maintenance.

We were not at all pleased that the expedition was coming to an end. Our time in Pakistan seemed to have passed with blistering speed. We had been on the move every day, crossing more than three-quarters of the length of the country. But there remained much we hadn't seen as well, including most of the dramatic northern region, where Pakistan boasts eight of the world's ten tallest mountains. And we knew only too well that we had barely glimpsed a few of the highlights of the many regions through which we had traveled.

If the weather had been less than cooperative, our Pakistani hosts had more than compensated for it. If the riding had been difficult, with far too many mishaps and close calls for comfort, as seasoned motorcyclists we knew better than to complain about any trip we could walk away from. The world's tallest balloon may not have turned out to be the world's best balloon, but at least it reached the sky as it was intended to do.

Most important for us, perhaps, Pakistan from now on would no longer be just current events and a list of Kiplingesque names on the map. Khyber, Peshawar, the Punjab, the Sind, these places meant something to us now. As the world's only international goodwill motorcycle gang, we hoped we had managed to bring a message of good wishes and good intentions to the thousands upon thousands of Pakistanis we had greeted. Certainly, that was the message they had given us to take back home.



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You may have thought that ERISA put an end to finagling with retirement plans. Well, that was the idea.

Pension raiding, 1983 style

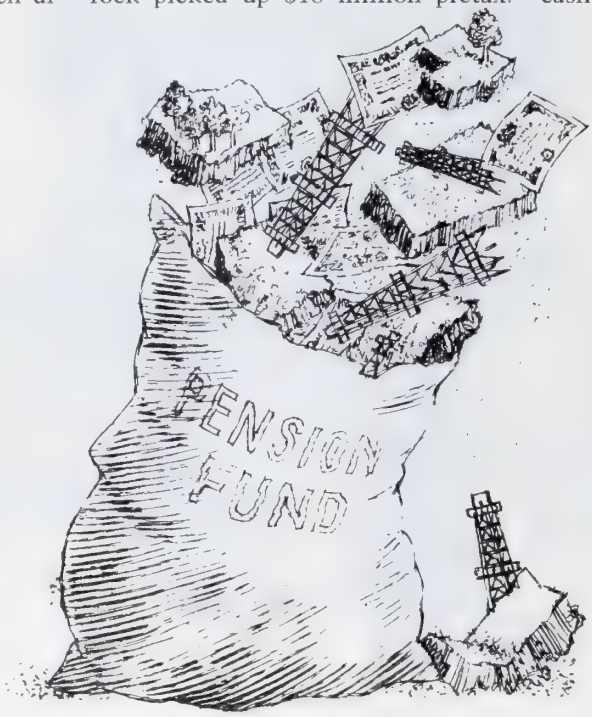
By Christopher Power

ANNUAL CORPORATE contributions to pension plans often turn out to be a nasty drain on earnings. Not to worry, for such diverse companies as Diamond Shamrock, Lear Siegler and Wheeling-Pittsburgh. They have hit upon a clever way to pick up some easy income. There's only one catch: Someday it might produce some very unhappy pensioners.

The trick is obvious, with a little thought. Why give *cash* to pension plans? Most companies have other things far easier to part with. Retirement funds, what's more, are allowed to hold up to 10% of their portfolio in their employers' securities or real property, and, with Department of Labor approval, an unlimited amount of intangible assets like royalties.

Last year U.S. Steel and Wheeling-Pittsburgh met pension plan obligations with specially created issues of preferred stock (FORBES, *Nov. 22, 1982*). Others have been even more creative in their generosity. Diamond Shamrock, the $3.2 billion (revenues) oil and gas company, gave its fund a royalty interest in its Texas oil and gas properties. Lear Siegler bestowed income from a number of Hawaiian leases. And though Burroughs Corp. made its contribution in cash, it has negotiated $30 million worth of sale leasebacks with its pension plan over the last two years, leaving the fund the proud owner of four of Burroughs' facilities.

The profits from such deals are a joy to a financial officer's heart. Issuing preferred stock instead of giving cash, for example, increased U.S. Steel's equity by $335 million. Diamond Shamrock picked up $18 million pretax.



Lear Siegler saved $5.6 million. And Wheeling-Pittsburgh upped equity by $26.3 million through the shares it contributed. That stock can't be sold, by the way, until the company elects to register them.

The problem here is not that these assets aren't worth their stated value. Rather, they tie pension plans to the corporation's future success in a way that threatens the arm's-length relationship companies are supposed to have with their retirement funds.

And whether or not you are disposed to worry for the potentially hurt pensioners, one thing is clear: The companies that resort to these noncash means of funding their pension plans merit close scrutiny. After all, if a firm has sufficient cash on hand to fund its pension plan in the customary way, would it risk public ire by resorting to alternative methods?

"Whenever a contribution is other than cash, you have the corporation deciding the plan's investment strategy," explains Ian Lanoff, the lawyer who administered ERISA for the Labor Department during the Carter Administration. "There could be situations where corporate officers are not as qualified as plan trustees in deciding what is the best for the plan."

Who is watching the cookie jar? The Department of Labor is charged with policing pension fund conflict of interest, and it has been questioning a few companies. But even though noncash contribution schemes are becoming ever more exotic, the DOL will not necessarily examine each new case. In fact, some observers say the DOL is not paying enough attention to the enforcement problems these new methods pose. Part of the problem: Jeffrey Clayton, a labor lawyer from Salt Lake City who now directs the DOL's office of pension and welfare benefit plans, has found himself embroiled in a political squabble with other DOL officials.

Meanwhile, the unions have little say over the transactions, even though the bulk of recipients are members of union-negotiated plans. One reason is that for years labor's antimanagement ideology was so pervasive that few union members wanted to act as pension fund trustees. "Now labor feels caught between a rock and a hard place," says Randy Barber, a pension consultant for several departments of the AFL-CIO. "People are extremely upset with current developments, but they can't protest when the companies are demanding concessions to stay afloat."

Why are all of these potential conflicts suddenly cropping up? "ERISA was supposed to deal with the problem," says one pension expert. "But it's been around just long enough to give companies an idea of what they can get away with." ■

When it's necessary to increase payroll taxes for Social Security and unemployment, nobody is happy. But when the shoe is on the other foot . . .

It's refund time (maybe)

By Jane Sasseen

As IF THE Social Security Administration didn't have enough to worry about, it now may have to pay hundreds of millions of dollars in refunds.

The money would go to employers and employees who claim to have overpaid their payroll taxes. That depends on whether salary-reduced annuities that many tax-exempt organizations provide are considered wages. If they are, then payroll taxes have been properly collected. If not, then it's refund time—and good news for hundreds of thousands of teachers, nurses, doctors, hospital administrators and school principals.

Take a nurse making $20,000 who accepts a $2,000 pay cut, which the hospital uses to buy her a $2,000 annuity. For income taxes, the IRS defines her wages as $18,000 and computes her taxes on that amount. But for payroll taxes covering unemployment and Social Security, the nurse has to include the value of the annuity as part of her wage. Same dollar value, same taxpayer, but two different wages.

For years that two-tiered tax, which had been created by federal statute precluding the IRS from collecting income taxes on these salary reduction plans, didn't create any problems. But in 1981 Rowan Cos., an offshore oil-drilling firm, went to the Supreme Court on a similar issue. Rowan provided meals and lodging for its employees. As with annuities, those fringe benefits were not taxed for income tax purposes but *were* taxed for unemployment and Social Security. Rowan sued, arguing for a consistent definition of wages.

The company won its case (FORBES, *Aug. 17, 1981*). In the process, the Court also indicated that Congress wanted wages to mean the same thing for both tax bases. Since then, employers and employees who paid payroll taxes on company-provided food and housing have received some $110 million in refunds.

Count on clever tax accountants to see the potential for prying still more money out of the government. "Rowan created the possibility of recovering back taxes," says Steven Holub of accounting firm Laventhol & Horwath. "Now that same principle may be brought to bear on annuities."

How much money is really involved? No one knows for sure, but a bit of rough arithmetic suggests the number is huge. Including employees of public schools, universities, nonprofit community hospitals, churches and other smaller tax-exempt organizations, about 7 million people nationwide are eligible for the annuities. An estimated 10% actually own them. With a three-year statute of limitations on refunds, and Holub's estimate of $500 a year per taxpayer in overpaid taxes, the total refund through 1982 could top $1 billion. Half of that money, of course, would go to employers and half to employees, since they share the Social Security tax burden.

Whenever such massive amounts are at stake, you can count on lots of folks to angle for a piece of the action. Laventhol & Horwath, for example, is advising its clients to consider filing for refunds, but the IRS, which collects these payroll taxes, has been quiet on the matter. Key logic in the Rowan decision may make it difficult to apply to annuities: Wage reductions to buy them are voluntary and benefit employees, while Rowan provided food and lodging for the firm's benefit and required that employees accept.

It is likely that this matter will ultimately be resolved in court—and only as it relates to refunds for the years prior to 1984. Congress this year reversed the Supreme Court's position and now says that the IRS is more than welcome to define wages differently for payroll and income tax purposes. New legislation specifically includes salary-reduced annuities for tax-exempt organizations in the payroll tax base. This settles things for the future—but in this case paying refunds for past errors could get very expensive. ■

Conventional wisdom says that the West is the land of tomorrow when it comes to technology. Since when has conventional wisdom ever proved to be right?

Go East, young man

By Stephen Kindel and Robert Teitelman

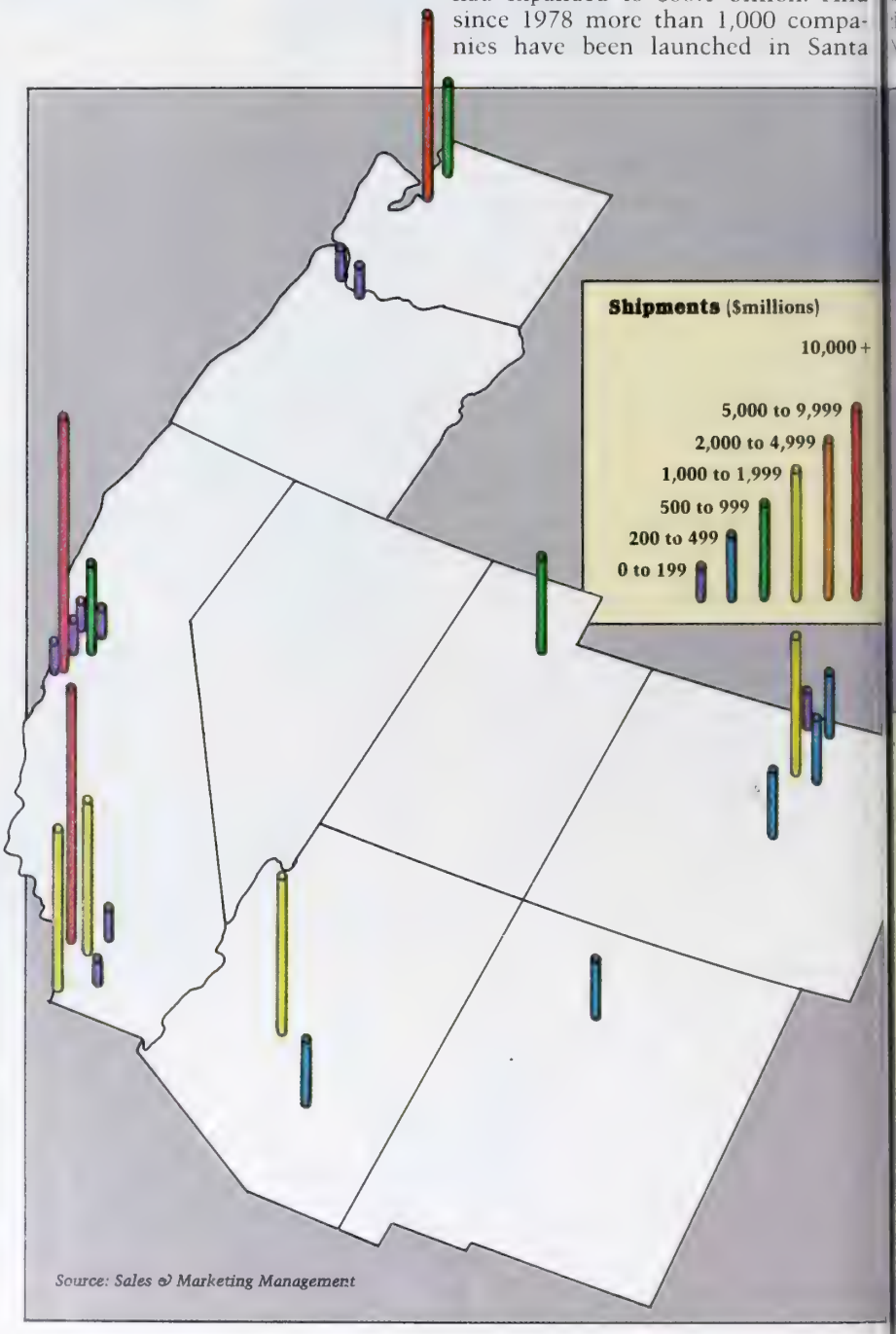
LOOKING BACK ON IT ALL someday, historians dating the decline and fall of Silicon Valley may fix on Nov. 5, 1982 as the absolute beginning of the end. On that day Neiman-Marcus opened its first branch in San Francisco. On that day and the next, the store handed out 60,000 charge applications, the number Neiman-Marcus had expected to dispense for an entire year.

Decline and fall? What has Neiman-Marcus to do with decline and fall? Maybe we're reaching a bit, but we suspect the rush for charge accounts in San Francisco is evidence that, in the minds of the entrepreneur-engineers who dominate Silicon Valley, capital formation was taking second place to buying $12,000 diamond necklaces for their girlfriends.

Or maybe it isn't that at all. Perhaps the end came at Ming's, the restaurant that sprawls along Route 101 in Palo Alto. The end came there when the talk over sizzling sautéed beef shifted from starting up another disk-drive company to cutting commercial real estate deals in downtown Palo Alto, where there has been pressure to abandon the low-rise zoning that made it a pleasant garden city for high-rise office towers. Or perhaps, just perhaps, it was when the first development of $1 million tract homes opened on the lush grassland near Foothills Park.

Just the exuberance of the West, you might say. They are making so much money so fast out there on semiconductors, floppy disk drives, Winchester drives, modems and microprocessors that all those engineers are only kicking up the traces a bit. Maybe so, but there's something Toynbee-esque or Gibbon-like about what's going on here.

Oh sure, the West Coast high-technology economy has never seemed healthier. Shipments of goods commonly categorized as "high tech" have risen dramatically in the West over the last eight years. In 1975 total shipments were a healthy $16.4 billion. By 1978 that amount had grown to $26 billion, and by last year they had expanded to $55.1 billion. And since 1978 more than 1,000 companies have been launched in Santa



Source: Sales & Marketing Management

Clara County—the area that encompasses the whole of the 10-mile-by-30-mile corridor known as Silicon Valley and all its spillover. The *New York Times* recently referred to Silicon Valley as "the nation's most fertile region for the development of high-technology devices."

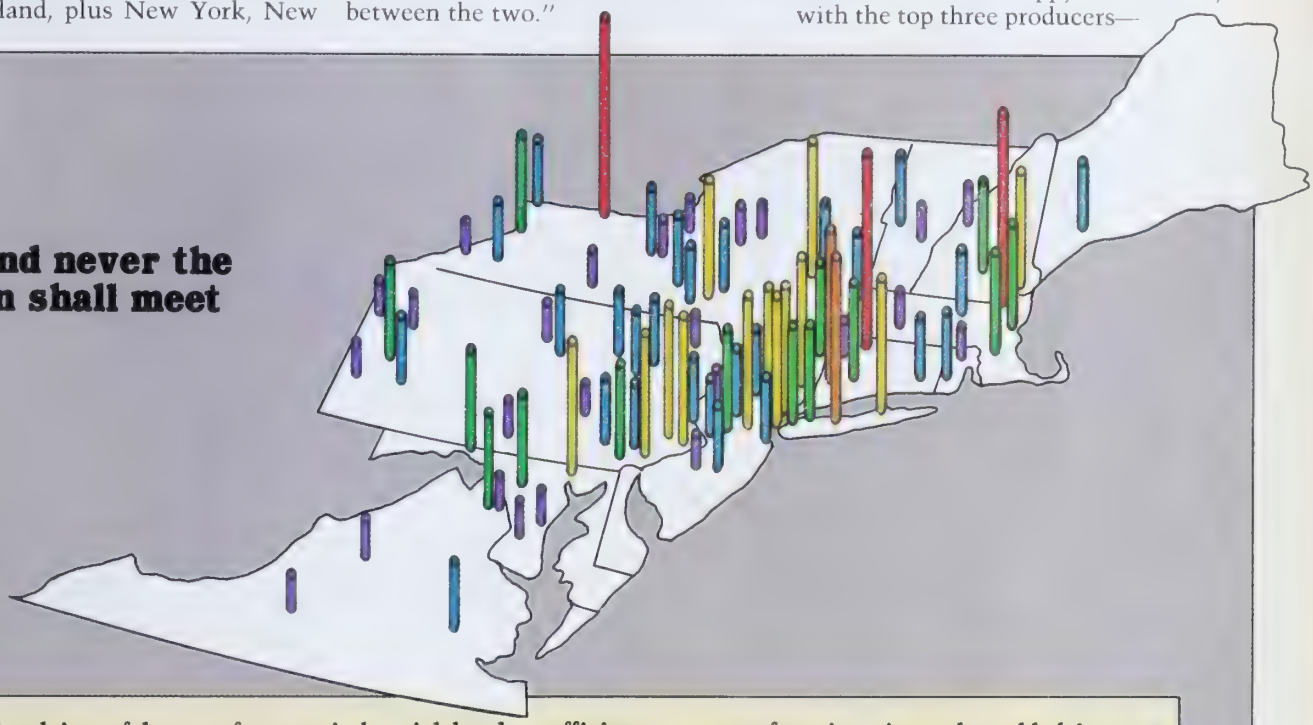
What a contrast to that great center of economic desolation, the industrial Northeast. But look again.

While the West was expanding its rate of technological shipments at a healthy 16.5% clip for the years 1975-82, the Northeast states were expanding their shipments a little faster, about 17%. But the Northeast started from a smaller base, you would say. Wrong, again. In 1975 the Northeast—that's the states of New England, plus New York, New Jersey, Pennsylvania, Delaware, Virginia and Maryland—shipped $21.6 billion worth of high-technology items, $5 billion more than spilled forth from the factories of the West. Thus, by 1982 the Northeast, almost completely unnoticed, had raised its level of shipments to $71.2 billion.

So, why the myths? Vigor in the West, decay in the Northeast? Partly it's a difference of style, partly of substance. "The West Coast is entrepreneurship," says Michael McGrath, a partner in Pittiglio, Rabin, Todd & McGrath, a consulting firm that assists electronics and computer companies, "while the Northeast is innovation. Many people don't understand that there is a significant difference between the two."

So, what is the difference? Entrepreneurship means starting a business with the primary goal of earning tons of money. It means being opportunistic and reading the pulse of the consuming public. And it means selling microchips when they're hot or chocolate chips when those take off.

Such opportunistic entrepreneurship shows up in the nature of West Coast startups. Two years ago only one company, Seagate Technology, was working on Winchester hard disks, designed to be incorporated into microcomputers. Today there may be 90 manufacturers of the same product, all within hailing distance of each other and all in Silicon Valley. Five years ago there were only six manufacturers of floppy disk drives, with the top three producers—



. . . and never the twain shall meet

Despite the claims of dozens of county industrial development officials to the contrary, technology and the industries that support it are as alive and well in the East as they are in the West.

There are many different ways to measure high-technology activity—sales, number of employees, number of patents issued. We have chosen factory shipments on a county-by-county basis, using 33 specific four-digit Standard Industrial Classification (SIC) codes. In so doing, we have eliminated the effect of government spending. This tends to hurt the West more, since certain areas, such as Bernalillo County, N.M.—Albuquerque's home county—gain a high proportion of their engineering and scientific totals from government employment. Conversely, by limiting our choices of SIC industries to those for which the technology component is the major factor, we were principally goring the East's ox. The elimination of SICs such as electrical machinery, traditionally counted by the people who measure such things, is based on our belief that there is not a sufficient amount of engineering value-added in new electrical, as opposed to electronic, devices.

Sometimes, the fates conspired so that there was a dual filter. New London, Conn., with its nuclear shipbuilding industry, was eliminated both because its income is entirely dependent on the military—even though the company is a private manufacturer—and because, with the exception of New London County, no other major shipbuilding area requires as much technological value-added for its products.

So much for the rules. Shipments are shown by county and by relative importance. They show a great depth of manufacturing strength in the East and surprisingly few areas of significance in the West. The boom, it would seem, is rather uneven.

Finally, we *do* know that there is a great deal of technological ferment going on in places such as Texas, Florida, Illinois and North Carolina. We are eliminating those areas only for the purpose of making a region-to-region comparison.

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Technology

Shugart, Control Data and CalComp (now a subsidiary of Sanders Associates, Inc. of Nashua, N.H.)—holding the lion's share of the market, along with captive manufacturer IBM. Today there are more than 60, also virtually all in Silicon Valley. Five years ago there were only a handful of microcomputer makers, led by Apple and Tandy. Today the number is impossible to count. Says Andrew Evans, a venture capitalist from Bellevue, Wash.: "Do you really think there's going to be a market for 260 manufacturers of microcomputers? Get serious."

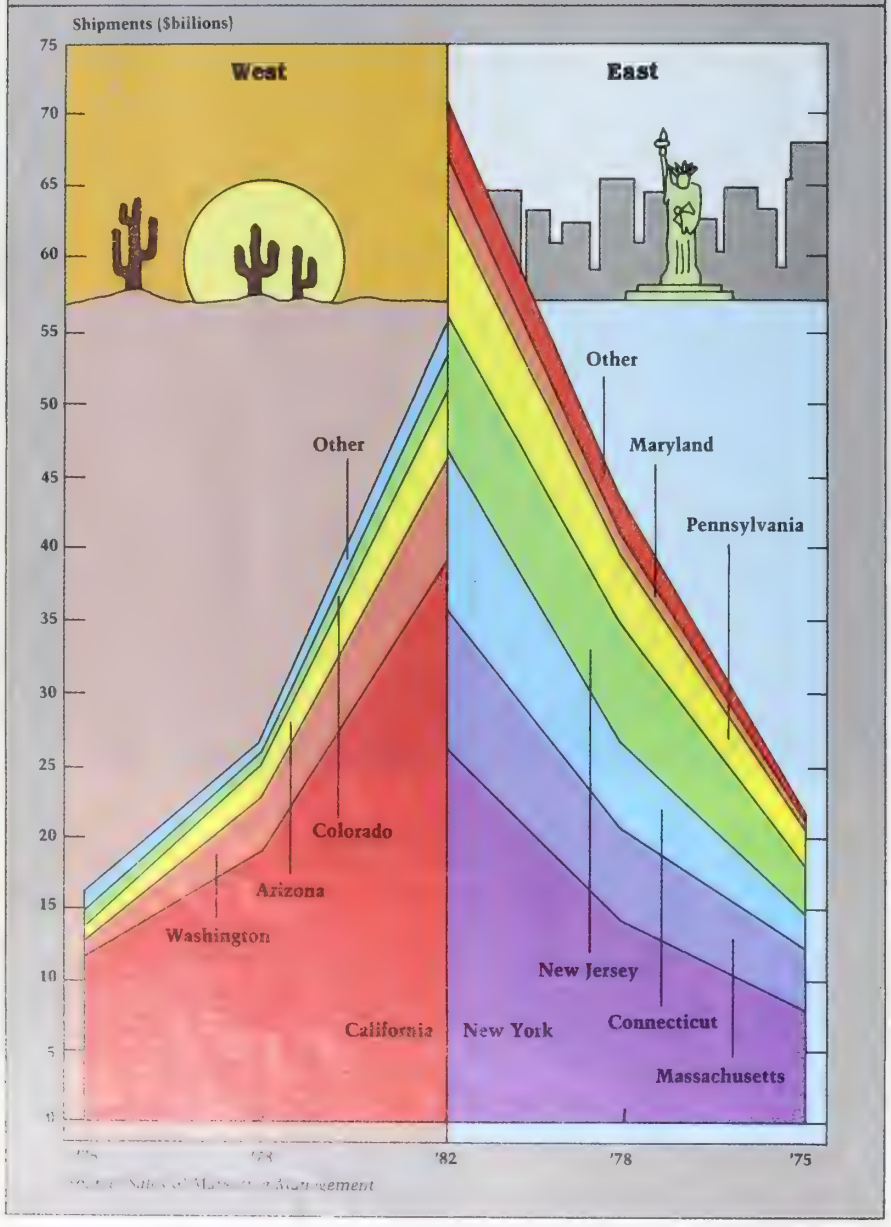
"Put it another way," says McGrath. "The West is commodities. You have thousands of companies, all competing within only a couple of spheres, each to become the fastest-growing, largest, most efficiently organized manufacturer of whatever they are making. Everybody else has to fall by the wayside." If McGrath is right—and we suspect he may be—there's trouble ahead for the West because the most efficient commodity producers are not the entrepreneurs of Silicon Valley but their hustling competitors, the Japanese.

Many of the products derived from these commodity items become commodities themselves. Video games are now a commodity item, and Atari's export of 1,700 assembly jobs out of Silicon Valley to the Far East is the almost inevitable result of commodity competition. Microcomputers are a commodity, with the result that many subassemblers are now locating in Mexico to drive labor costs as low as the cost of the guts of a new machine. Even operating systems are commodities. Witness the huge number of firms with whom Microsoft and Digital Research—the producers of MS/DOS and CP/M, two major microcomputer operating systems—have signed agreements, including numerous Japanese firms. It's a dangerous way to do business.

Overconcentration in the commodity sector of the computer business is, in some respects, the least of the problems facing the West. A far greater threat, many think, is the runup of the defense budget under President Reagan. California already receives more than 17% of all defense dollars, and that percentage is likely to remain stable, or grow, with any increase in military outlays. More spending ordinarily means more jobs, yet California's State Office of Economic Policy, Planning & Research is scared stiff. That's because, in its words, "Military spending is likely to attract skilled workers—craftsmen, engineers and scientists—into military production and thus away from civilian firms competing in world markets (particularly with nations with less military spending)." That's bureaucratese for the fear that too many engineers will be siphoned off by the military for California to be able to remain competitive with the Japanese. According to the study, California could actually lose 300,000 jobs through increased defense spending, because of the starvation of other, faster-growing sectors of the economy. Most of those would be technology-related jobs at the high, value-added end of the spectrum, the kind most needed to lead California. Still another study, this done by the Western Interstate Commission for Higher Education (WICHE), points to a glaring educational gap in the West's abil-

Sunrise, sunset?

Shipments of high-technology goods grew explosively in both the Northeast and West from 1975 to 1982. As the chart below shows, California, a strong producer of components and commodity items, dominates shipments in the West and is the largest overall. But shipments in the Northeast, particularly from Massachusetts, Connecticut, New York and New Jersey, have grown even faster than in the West—7% vs. 6.5%.



THE LAND AND THE PROMISE.

, country puts its dreams and its eals into symbols—a flag, a plot of ound, a monument. The people ow to love these symbols, fight for em, die for them. A symbol and hat it stands for must stay together. ey are indivisable."

—Thomas Crawford, sculptor of The Freedom Statue that surmounts the great dome of the Capital.

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Technology

ity to supply its future needs of technicians and engineers. While 48% of all high school seniors in the Northeast had completed three or more years of mathematics by graduation, only 24% of their counterparts in the West had completed the same level of education. In science, the disparity is even worse: 35% with three or more years in the Northeast against only 15% in the West. And the quality of education in the West must be called into question: Last year 84% of the teachers newly hired to teach math and science in the Pacific states were found to be unqualified in those subjects. In the Northeast, by comparison, only 9% of the new teachers hired were not qualified. Such a condition will leave the West almost entirely dependent on imported scientific and engineering talent.

That's nothing new. California and the entire West's technological growth originally stemmed from Eastern transplants. It was Frederick E. Terman of MIT who migrated to Stanford and built the reputation of the university's electrical engineering department. It was another MIT alumnus, Robert Noyce, who founded Fairchild Semiconductor and Intel. And he was only following William Shockley, one of the inventors of the transistor, who had come out from Bell Labs in New Jersey. Why shouldn't the West continue to expect that Easterners will still be lured by a better climate and by the chance to strike it rich?

"People born in the area, New York and northward, are increasingly tending to stay here," says Claude Finn. Finn, 33, is a software engineer with Solvation, a startup computer company in Westborough, Mass., who originally worked on Data General's Eagle project, described in Tracy Kidder's *The Soul of a New Machine*. Finn, it should be noted, is not speaking as an Eastern chauvinist. A native Californian, he says: "I actually still prefer California, but I stay in New England because it's financially rewarding."

And so, it seems, it will continue to be, both for the present and the foreseeable future. As Fred Van Veen, vice president of Teradyne, a Massachusetts manufacturer of semiconductor test equipment, puts it, "The Northeast's edge is in the fact that all the real value-added in technology is built-in here. The price of semiconductors keeps going down, down, down, so it's hard for the manufacturers of the West to make more money even if they are pushing up volume." With less value-added, the Westerners have less money available to pay technicians. Van Veen continues: "We add the software here and package the components, and the value of our shipments just keeps going up. We may build smaller quantities of things than they do in the West, but each thing we build has a higher brains content."

And that, in the end, is what ought to scare the West the most. We are used to thinking of the future as microprocessors and microcomputers because that is what's in the news today. But the future is really to be found in many of the areas of science just emerging from the laboratory, areas that have been all but ignored by the entrepreneurs of the West. "If you wanted to take optical fibers as a good example of a major future industry," says Frank W. Dixon, an analyst at Gnostic Concepts, a market research firm in Menlo Park, Calif., "you'd see that both the major research and much of the manufacturing is being done in the Northeast."

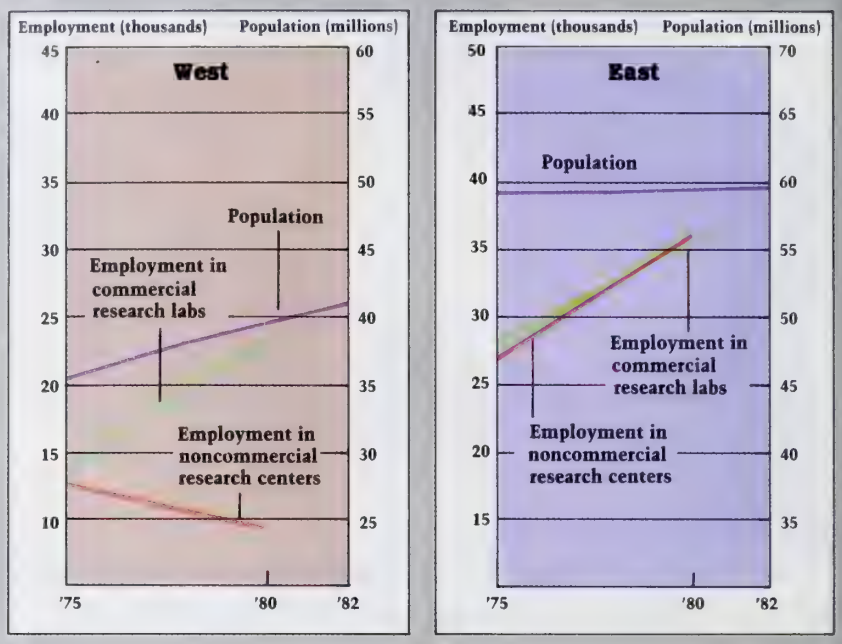
That's not an isolated example. The West's current domination of laser research, says John Kessler, a Rhode Island-based analyst who follows the industry closely, is being challenged by the East in several important areas. "Several of the newest products—the neodymium YAG laser, the alexandrite laser—are Eastern in origin. Right now, if you were to draw a circle of 50 miles radius around Bell Labs in New Jersey, you'd see tremendous things going on in the industry."

So do the venture capitalists. According to the *Venture Capital Journal*, the Northeast, as a group of states, received 42.7% of the capital available from private firms in 1981, compared with 40.2% for the West. By last year the gulf in commitments had widened, with Northeastern companies receiving 57.1%. While it is hard to call a two-year change a trend, taken with other factors, the handwriting would seem to be on the wall.

No one, of course, should yet write off the West. Companies such as Apple and Hewlett-Packard will always be in the forefront of innovation, and both are building enormous value-added capabilities as they integrate into more complex systems. But there is also nothing sacred, God-given or manifestly destined about the West. The future, as always, belongs to those who work hardest to reach it.

Test tubes and babies

From 1975 to 1982 blue collar workers left Smokestack America and headed West in droves. The result: The West grew about 17 times faster than the Northeast. The Northeast, however, added 50% more engineering and scientific jobs in research centers than the West.



Source: Bureau of the Census; New Jersey Department of Commerce & Economic Development

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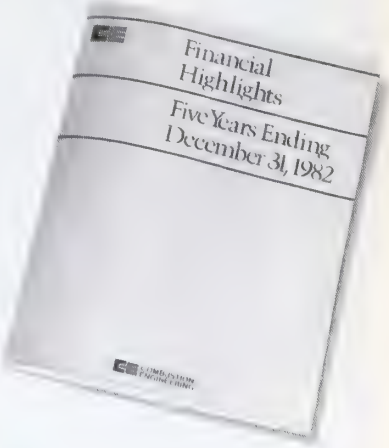


COMBUSTION ENGINEERING

Energy Technology. Worldwide.

Critics once likened Stone Container Corp. to an old maid. But these days the company looks very attractive.

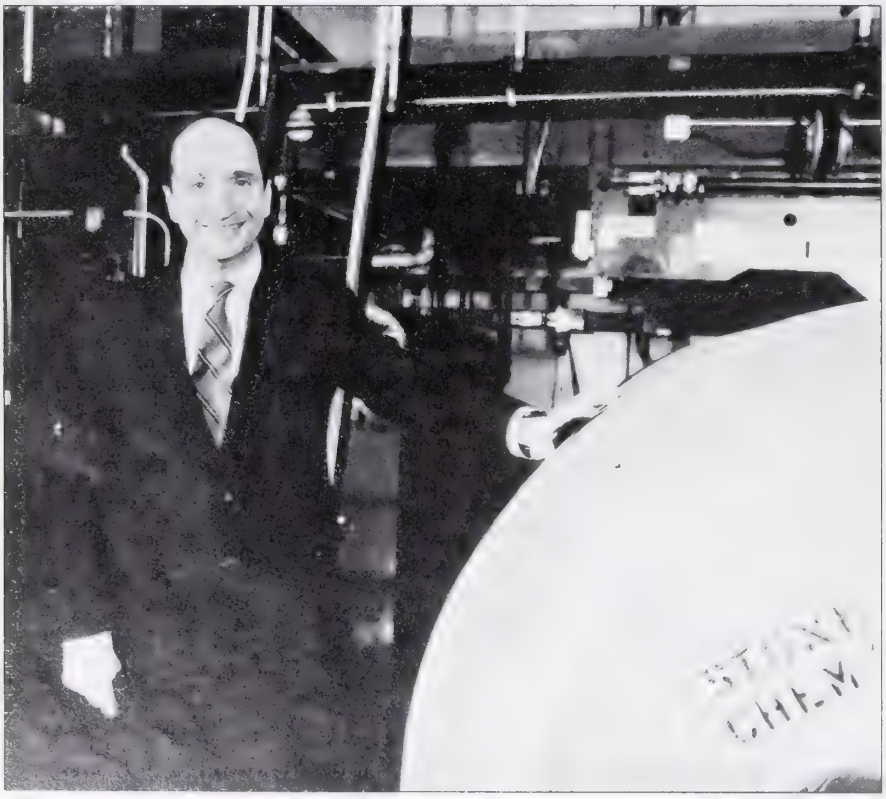
Guess who gets the last laugh

By John A. Byrne

BACK IN 1979 Boise Cascade tried to buy Stone Container Corp. Boise's bid was well over book value and would have given shareholders more than twice the price at which Stone shares were then trading. Chief Executive Jerome Stone tentatively agreed to sell. But Roger Stone, who was preparing to succeed his uncle at the family-controlled company, resisted. "He was younger, more dynamic and more optimistic about the future," recalls Mark Rogers of Dean Witter.

Roger Stone was also right. Stone Container's current market value is nearly 3 times the $120 million that Boise was offering just four years ago. The company, once criticized as an undercapitalized independent paperboard producer, is now a favorite with investors. Its shares sell at 12½ times peak 1981 earnings and just over 2 times book value.

Of course Chicago-based Stone had an earnings decline last year and posted losses of $962,000 in the first quarter of 1983. But Wall Street sees beyond the current recession, and some analysts expect a paperboard shortage by the mid-Eighties. One reason they think Stone will be a major beneficiary is that it fared far better than competitors during the recent downturn.



Stone Container Corp. Chief Executive Roger Stone
Not taking Boise Cascade's money was a smart move.

Roger Stone, 48, the boyish-looking chief executive whose grandfather founded the company 57 years ago, has had a lot to do with this. Ever since fighting off Boise, he has been hard at work modernizing facilities and expanding capacity. Last year Stone boosted paperboard production, which accounts for 41% of sales, by 12%, while the industry posted a 6.3% decline. Corrugated container shipments bucked similar trends with a 4% rise.

Over the past five years Stone has poured $220 million into new plant and equipment. Unlike competitors with high-cost older mills, the company has been able to add capacity on an incremental basis. The alternative? Standing still or building new facilities at a minimum cost of $350 million.

Stone also spent $38 million last year to upgrade its Coshocton, Ohio mill, making it perhaps the most energy-efficient in the industry. This plant should generate $7.5 million in cost savings this year alone, which works out to better than 10% per ton of production. In a major move toward vertical integration, Stone also acquired Samson Paper Bag Co. for $7.4 million, a price well below appraised value. Samson makes grocery bags and uses kraft paper as raw material, a product produced by Stone.

To finance this expansion, the company borrowed heavily, thus pushing total debt to 48% of capital. Roger Stone now admits he brought on new capacity too soon. But at least his firm was able to refinance by selling $37 million worth of stock earlier this year. Now the debt ratio is down to a more comfortable 35.6%.

Stone's rush to establish more efficient capacity, however, underlines his basic strategy. "We concentrate on what we do best," he explains. "Most of our competitors look at boxes as a commodity, another conversion step as an extension to cutting trees."

Not so at Stone. By working closely with customers, the company aims to sell more profitable customized products. Stone, for example, developed triangular packaging for books and record albums sold through the mail. This reduces damage returns and cuts customer costs. Such proprietary innovations account for 30% of the firm's container sales.

Signs of a turnaround, meantime, are already showing. In April linerboard prices went up $20, to $270 a ton. That's still $30 a ton less than 2½ years ago, but a welcome sign nonetheless. Optimists forecast a climb to $300 this year and to $360 in 1984.

As the purest investment play in this business, Stone now may look even more attractive than it once did to Boise. But Roger Stone, whose family still owns 50% of the company, makes it clear he wants to stay independent. "If somebody came to offer me a billion dollars tomorrow, I'd say, 'Here are the keys,'" he explains. "But I think we have great potential, and I'm not planning to sell." ■

On the Docket

With crowded courtrooms and expensive lawyers, you would think companies would rely more on commercial arbitration. You would be wrong.

Flies in the ointment

By Richard Greene

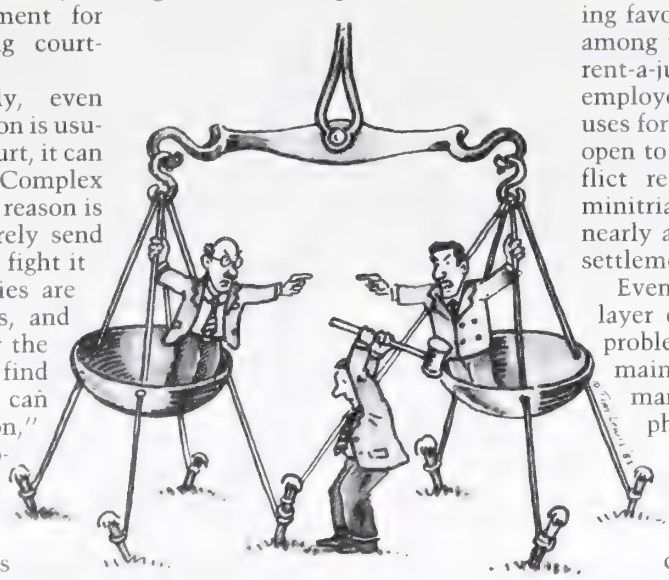
ARBITRATION AS AN ANSWER to our crowded courtrooms is much like a child's solution to war: "We'll send our strongest guy and their strongest guy onto an island, and the country whose guy comes out alive wins."

And like that approach to international conflict, commercial arbitration runs into a major snag: Not everybody wants to go along. In some areas, such as labor-management disputes, arbitration is a roaring success. But although its use has increased over the last decade, for much of American business arbitration just isn't an effective replacement for costly and time-consuming courtroom trials.

Why not? Unfortunately, even though commercial arbitration is usually cheaper than going to court, it can still be pretty expensive. Complex cases can cost millions. One reason is that corporations don't merely send opposing chief executives to fight it out in a closed room. Parties are still represented by lawyers, and lawyers are still charging by the tenth of an hour. "You can find yourself in a procedure that can be just as rigid as litigation," explains Eric Green, an associate professor at Boston University School of Law. "Companies go for arbitration because they think it's always fast and informal, and then they find that it's frequently not."

There's also a perception that many arbitrators tend to split the difference in a case instead of declaring either side the winner. "Lawyers worry about compromise awards," says Robert Banks, general counsel for Xerox. "Professional arbitrators have a tendency not to want to get anybody really unhappy, so instead they'll cut the baby in half."

But Robert Meade, vice president of case administration for the American Arbitration Association, thinks that in many situations the ability to compromise may actually be an advantage. "In those disputes that do reach arbitration you generally have some fault on both sides. In the court you hang or fall based on a legal argument. In arbitration we look for equity." Fair enough, but the attorney who thinks he has a good shot at a total victory in the courtroom is not going to take a chance on a partial victory by submitting to arbitration.



All of which points to the real obstacle for commercial arbitration: Lawyers are standing resolutely in the way. They regularly object to the fact that arbitration deprives a client both of unlimited discovery proceedings, in which witnesses for the opposition can be questioned at length, and of the right to appeal. Not surprisingly, many attorneys are harsh critics of the use of arbitration to settle business disputes. Corporate lawyers are trained to make an allout effort to win, and, if winning requires delaying justice through endless depositions or ongoing appeals, then so be it. "Outside attorneys spend their time trying to wall their clients from all risk," says Peter Mear, head of the litigation section for Aetna Life & Casualty.

Mear puts it politely. A cynic could point out that outside counselors get paid only when their services are required. That can be a mighty strong incentive to avoid a time-saving device such as arbitration.

Because of resistance to commercial arbitration, alternatives are gaining favor with corporations. Notable among them is California's so-called rent-a-judge procedure, now being employed in several other states. This uses former judges, and cases are still open to appeal. Another popular conflict resolution mechanism is the minitrial, a nonbinding process that nearly always results in a negotiated settlement.

Even as society piles up layer after layer of alternatives, however, the problem of crowded courts remains. Says Marvin Comisky, managing partner of the Philadelphia law firm Blank, Rome, Comisky & McCauley: "It's a mystery to me. The more systems we create to dispose of court cases, the more cases appear." ■

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THE NATION'S NEWSPAPER

NEWSLINE

A QUICK READ ON THE TOP NEWS OF THE DAY

WEATHER: Flurries linger over Northeast from western Pennsylvania to New England. Storm in the Rockies from Arizona to Idaho brings snow to the high elevations, rain to the valleys. Showers due in Pacific Northwest, lower Mississippi Valley. Light snow and flurries fall over Kansas and Oklahoma. Full color page. 12A.

WALL STREET: Crosscurrents of good and bad economic news confound market. The Dow Jones index slips down 2.32 points to close at 1122.97. 8B.

STAND-IN: Monaco's Princess Caroline, left, attends Houston, Tex., dinner to promote rebuilding of London's Globe Theatre, a favorite project of her mother, the late Princess Grace. 2D.

CAROLINE: Takes over for mom.

ISRAELI PRESIDENT: Knesset rejects Begin nominee, selects Irish-born Chaim Herzog, a former U.N. ambassador and political foe of prime minister. 9A.

NICARAGUA: USA accused of financing rebel invasion from Honduras. Nicaraguan officials request U.N. Security Council review as fighting escalates. 9A.

JOBS: Bill stalls short of final passage when House, Senate disagree on formula to distribute funds.

THREE MILE ISLAND: Engineer accuses plant

USA TODAY

VIA SATELLITE

Baseball $$$

Phillies win games, lose money

Sports section, 1C

Weather across the USA

Color forecast, 12A

News of 50 states

Every day, plus Offbeat USA

News section, 6-7A

Health care: Employer-worker push urged to control costs

Special for USA TODAY

NEW YORK — Soaring medical bills are expected to cause consumers — led by corporations — to seek a better deal on costs, a new study said Tuesday.

Health costs hit a record $287 billion in 1981 — 10 times higher than a decade earlier — and could rise to $462 billion by 1985, said a survey done for *Prevention Magazine*.

The sampling of 207 business leaders and medical experts showed:

■ 75 percent of employers said they were likely to pass along more of the cost of health benefits to workers.

■ 47 percent of employers said worker education is important to counteract passive attitudes about costs, with 39 percent favoring "programs that would teach employees to act like 'smart shoppers' with their physicians, asking questions about treatment alternatives and costs."

■ Corporations also are likely to pressure the medical profession to cut costs.

The survey also found most workers have no incentive to hold down health care costs because they pay only the first dollar of cost under most care plans.

Health system report card

What 207 business leaders and health experts say

Quality of health care: 93% rate it good or superb

Equality of service: 57% rate it good or superb

Controlling costs: 89% rate it poor or worse.

Source: Prevention Magazine

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	*USA TODAY Primary Reader	**Four Newsweeklies Avg. Audience	**NYT/WSJ Avg. Audience
$35,000+ HH Income	43%	34%	56%
Attended College	69%	54%	73%
Top Management	14%	7%	14%
Professional/Managerial	41%	33%	52%
Foreign Travel	42%	23%	32%
6+ Business Trips	17%	7%	12%
Travel by Air	53%	26%	38%
Prof Mgr/6+ Bus. Trips	12%	5%	9%

*SMRB Readership Survey of Primary Purchasers, 1983

**SMRB 1982 Study of Media & Markets. Time, Newsweek, U.S. News & World Report, Sports Illustrated, New York Times & Wall Street Journal

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THE NATION'S NEWSPAPER

USA TODAY

VIA SATELLITE

The U.S.A. in an entirely different way.

Nigel Chattey, transportation and engineering consultant
A dream of resurrecting the historic Erie Canal.

Faces
Behind The Figures

Edited by John R. Dorfman

Dredge the Erie

Transportation consultant Nigel Chattey doesn't think small. His goal, which would cost about $6 billion or so for starters, is to dredge the Erie Canal in New York State to make it suitable for coal and grain barges. With the dredged material, Chattey proposes building a 2,000-acre island south of Long Island. This would create not only a deep-water port (for coal in particular) but also a site for such unpopular but necessary facilities as oil refineries.

Chattey, 55, is no pipe-dreaming kook. Since 1963 he has headed his own engineering and transportation consulting firm, Nigel Chattey Associates, Inc. Over the years he has advised such firms as Mobil, Litton Industries and Royal Dutch/Shell. Now working out of his suburban New York home, he spends almost all his time on the Erie project.

Today, the storied Erie Canal is almost unused. It carries an occasional petroleum barge, a few sightseeing boats and a modest traffic in yachts going from the Great Lakes to Florida or back. To be commercially usable, it would have to be dredged to a depth of around 20 feet and a surface width of 300 feet (250 at bottom).

While the familiar song has the canal stretching "from Albany to Buffalo," Chattey would settle for resurrecting the part from Albany to Lake Ontario. That would allow shippers of western coal to use barges for a big part of their shipping route.

Chattey says Western strip-mined coal "is low in sulfur and costs one-half to one-fourth as much to mine as underground coal. But by the time it is delivered by rail, it is no longer competitive." The canal could also offer a low-cost passageway for midwestern grain.

It has been about seven years since Chattey began pushing his idea, which he calls ICONN-Erie. (The initials stand for Island Complex Offshore New York and New Jersey.) Already his effort has been the subject of at least one book, *Chattey's Island*, by James Ehmann. But it's still an idea in search of, among other things, money.

Still, Chattey is no stranger to overcoming obstacles. British born, he served with the Royal Commandos. At 18 he learned to curl up next to his camel for warmth during cold nights on the Pakistani desert. "You must tie the camel's hind foot to his nose," Chattey recalls. "However, he will still try to roll over on you."—**Stanley W. Angrist**

Greed and fear

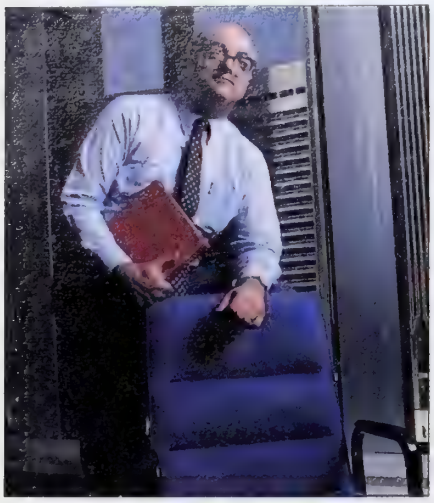
Lee Idleman kisses his hand and reaches up as if to pluck something out of the air. He's describing how some components of his stock market "greed index" are calculated.

Idleman is research director for Dean Witter Reynolds Inc., and his index, which might better be termed a "greed-and-fear" index, has done rather well in the 15 years that Idleman has been putting it together every one to six months ("as the spirit moves me"). The highest, or greediest, rating ever recorded—89—was the very first, in 1968. That, it turned out, was right before a bear market that saw the DJIA drop 300 points in the next 19 months. "Back then," Idleman recalls, "money managers were talking about long-term compound growth of 25% to 30% a year." In other words,

Faces
Behind the Figures

when greed runs rampant, look out. It may take a while, but you can expect a correction to come.

How does the index work? Those money managers' expected rate of return is one of ten variables in the index, to each of which Idleman assigns up to ten points. Others include the proportion of assets committed to stocks by institutional investors; the monthly volume in new issues; the willingness of portfolio managers to talk about their own private holdings; and the strength of investors' taste for small and low-quality companies. A reading of 0 would be the extreme of fear, and a reading of 100 the extreme of greed.



Lee Idleman of Dean Witter Reynolds
If portfolio managers brag, duck.

Not surprisingly, the greed index currently reads a fairly frothy 69. And that's one reason Dean Witter Reynolds recommended recently that clients put 20% of their equity portfolios into cash. But Idleman thinks the index does an even better job of "identifying extremes of fear." Four times in the past 15 years it has dipped below 30, most recently in June 1982. Each time, a major rally followed.

Idleman's thick glasses and plump figure make him look scholarly in repose. When he talks about the market, though, his face lights up with boyish enthusiasm. Right now he likes energy stocks such as Schlumberger and Gulf Oil. Why? Because so many people are now afraid of them.—**J.R.D.**

Fast finance

"I'd really like to finance McDonald's, but they don't need us," says Mort Fleischer wistfully.

Little matter. Fleischer, the 46-year-old president of Franchise Finance Corp. of America, is doing nicely providing real estate to potential franchisees who want to run outlets for such chains as Burger King, Hardee's, Long John Silver's, Kentucky Fried Chicken, Taco Bell, Arby's and Wendy's.

To understand why the franchisees are hungry for Fleischer's sites, you need to know how the industry has changed in recent years. In the late 1960s and early 1970s, savings and loan associations were glad to make favorable loans to franchisees. The loans carried fixed rates, and they covered a large portion of the purchase price for buildings and land.

No more. These days, where money is available, the S&Ls will loan only partial amounts to cover land and buildings. And no more Mr. Nice Guy—rates are variable, not fixed.

Into the breach stepped Fleischer, whose previous ventures included land development, insurance and coal mining. But he doesn't make loans. He takes the real estate tax shelter route. FFCA raises money through limited partnerships, organized under the name Insured Income Properties. Since Fleischer started operations in 1980, there have been some 20,000 limited partners. This year alone Fleischer and E.F. Hutton, the underwriter, have raised $150 million. The minimum investment is $5,000, and the average investment is $20,000.

FFCA actually buys the fast-food outlets itself—land, building and equipment. The Phoenix-based company then leases them to the franchisee, charging either 14.5% of the purchase price per year or 6% of gross sales, whichever is greater. According to Fleischer, the investors stand to realize a long-run annual rate of return around 10%, of which two-thirds is tax sheltered for the first five years. And Fleischer? With a quarter of a billion dollars currently invested, he probably earned about $250,000 last year.—**Ellen Paris**

Grounding the Airbus

"One thing I learned at the Stockholm School of Economics," deadpans Jan Carlzon, president of the Scandinavian Airlines Group, "was that, if a company runs at a deficit, it is always because costs are higher than revenues. So you either cut costs or increase revenues." But Carlzon, 42, has given that bromide a twist. Faced with a $17.3 million loss in fiscal 1981 at Scandinavian Airlines, Carlzon decided to increase revenues by spending more, not less.

While beleaguered airlines around the world have been cutting back, Carlzon is pouring $50 million into improving SAS' so-so service, upgrading Copenhagen airport, the airline's route hub, and increasing flights to major destinations in Europe. Rather than lay off workers, Carlzon shifted them to service operations. Most strikingly, he grounded SAS' four Airbus aircraft worth $109 million and is

Mort Fleischer, president of Franchise Finance Corp. of America
The franchisees seem to be hungry.

efurbishing 60 aging, fuel-inefficient DC-9s. The airbuses will be used only or limited charter flights and an occasional international route until the DC-9s are ready. It sounds perverse, but it gave SAS scheduling flexibility and more frequent flights.

Results? Operating expenses went up 22%, to $1.5 billion in fiscal 1982. But operating revenues rose 25%, to $1.6 billion. For the year ended Sept. 30, SAS netted $53.5 million, a record for the 36-year-old airline, 50%-owned by Norway, Denmark and Sweden.

Carlzon has aimed his spending at the lucrative business travel market. By increasing the number of passengers willing to pay full fare for SAS' expanded services—roomier seating, special meeting rooms, separate check-in counters, better frequencies—he can actually lower fares for discount passengers in the back of the plane without penalizing profits. Previous management's cost-cutting hurt SAS' service reputation, especially important for businessmen willing to plunk down extra money for a full-fare ticket. Last year every SAS worker got a new watch to celebrate having

SAS President Jan Carlzon
Taking a calculated risk.

achieved the best on-time performance in Europe.

If fuel prices rise suddenly, or if traffic picks up dramatically, those DC-9s will be albatrosses. It's a risk, but a calculated one. Says Carlzon: "The day someone calls and demands a ticket on an Airbus rather than a ticket to Frankfurt, we'll reconsider our decision."—**Kathleen K. Wiegner**

Stepping up

"If Ralph Waldo Emerson had an M.B.A., he would have said, 'Know thy market.'" That homily comes from Arnold Hiatt, 55, CEO of fast-growing Stride Rite Corp. Literature may be Hiatt's hobby, but shoes are his business. Revenues at the Cambridge, Mass.-based firm have more than doubled, to $225 million, since 1978. Earnings were up 22% last year, to $11 million. And the stock has quadrupled in the past 16 months.

Arnold Hiatt, CEO of Stride Rite Corp.
The first try at running shoes was a stubbed toe.

Two 1979 acquisitions from Uniroyal played a key part in Hiatt's success. One was Sperry Top-Sider. Hiatt snapped it up just before the preppy fashion wave made the Top-Sider boat shoe de rigueur among many who had never set foot in a marina. "We took an exclusive product and made it more democratic," says Hiatt with a slightly facetious smile. Democracy also brought in $46 million in sales and an estimated 20% of net last year.

The other acquisition was Keds, on which Uniroyal had lost $22 million in 1979. The name Keds was well known, a near-synonym for sneakers. But while athletic shoe sales boomed on the heels of the jogging craze, Keds never developed specialty running or tennis shoes. Now Hiatt is playing catch-up. Meanwhile, the soft-spoken Massachusetts native has improved margins at the acquired sneaker company. New foreign suppliers and manufacturing facilities have kept costs from escalating. Yet less production is farmed out than earlier, so that Stride Rite can control quality and cost. And Stride Rite has been able to get Keds into such previously untapped retail outlets as Macy's and Herman's World of Sporting Goods. Result: Keds, which until December was an unincorporated subsidiary, is expected to earn $4 million on sales of about $80 million this year.

The company did stub its toe in the rush to bring out a running shoe. Orders were taken for a hastily developed model called the Millenium. But poor design and production problems killed the shoe. That, says Hiatt, was "a testimony to our lack of management depth." Still, the Millenium hasn't dimmed Hiatt's enthusiasm for running shoes, or for growth. With a new line of running and tennis shoes out, Keds is trying to win back some of the market it abdicated to well-known competitors like Nike and Adidas. And Hiatt is once more on the prowl for acquisitions.—**Jane Sasseen**

Marriage of convenience

What do you get when you marry a leveraged buyout to a syndicated partnership? An innovative deal called Television Station Partners that puts veteran broadcast executive Martin Pompadur at the head of his own company, for very little of his own money.

Until recently, Pompadur was in charge of the six TV stations at Ziff Corp., which had hired him away from ABC to help it diversify from magazine publishing. Then William Ziff decided that he really did like print best. Pompadur sold off two of the Ziff stations, and then promptly

Faces
Behind the Figures

offered himself as the buyer of the other four (situated in Augusta, Ga., Rochester, N.Y., Saginaw, Mich. and Steubenville, Ohio) for $56 million.

Before joining Ziff, Pompadur had served 17 years at ABC, rising to the

TV station owner Martin Pompadur
Expect a sale by 1990.

board of directors. For all that, when it came to arranging financing for the buyout, he admits, "I was a little over my head. Prior to this, when I needed money for an acquisition, I went to Leonard Goldenson [chairman of ABC] or to Bill Ziff."

Pompadur's first stop was a venture capital firm with experience at helping managers buy the business they run. But they "wanted too much of the equity," he says.

Pompadur found the expertise he wanted at Rothschild Inc., where corporate finance man Mark Feldman cooked up a deal that kept his client firmly in control. Feldman sensed that wealthy investors had read about the money to be made in leveraged buyouts. Maybe they would like to get a piece of the action along with management? Along with Smith Barney, Rothschild raised $26 million in equity through a limited partnership and persuaded Manufacturers Hanover to lend the rest of the purchase price with a few other banks.

The limited partners—about 225 of them—get some tax benefits, but mostly they are looking for a big capital gain when Pompadur sells the stations, which the contract encourages him to do by 1990. They are entitled to 150% of their capital before Pompadur gets 35% of the rest of the profits. "I don't get mine 'til the back end," Pompadur says. To make his profit, Pompadur has to increase the value of the stations, all network affiliates, by roughly a third. He thinks he can do that, despite the fact that traditional broadcasting is a "maturing business." Under Ziff, Pompadur poured money in to improve the station's quality. Now he plans to get more out.—**Pamela Sherrid**

Out of school

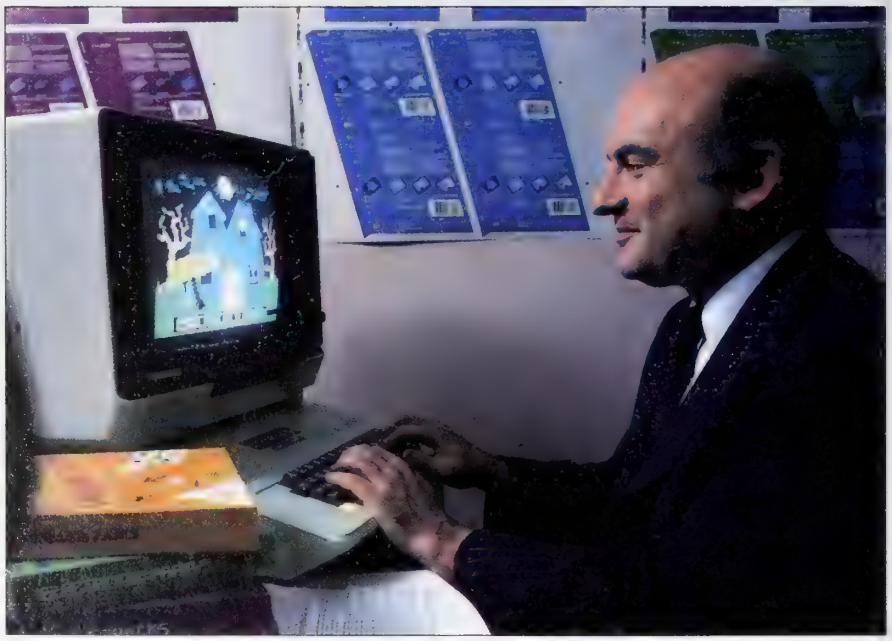
Remember *Junior Scholastic, Science World* or *Co-ed* from your school days? They, and nearly two score others, were all published by Scholastic Inc., a company that is still around but, like some other fondly remembered institutions, has had its problems in recent years. Now Richard Robinson, Scholastic's 46-year-old president, is trying to change all that. His proposed solution amounts to a six-syllable word: diversification.

Scholastic publishes some 35 magazines for educators and children, operates five book clubs and produces network and cable programming for children. But profits dropped from $4.5 million in 1979 to $500,000 in 1981. Last year, aided substantially by a $900,000 aftertax gain from the sale of a California warehouse, earnings bounced halfway back, to the 1979 level, totaling $2.1 million.

To keep the fragile recovery going, Robinson, the son of the company's founder, has pumped $5 million into two new projects. The first, introduced last month, is Wizware—14 educational computer programs for kids from 5 through 15. Scholastic already sells computer software to schools, but Wizware is targeted on the new generation of home computer enthusiasts. Robinson hopes to add more than 40 programs by next year to the 14 available now. "Parents," he says, "want their kids to learn more from computers than how to play games."

The programs—about $40 for disks and $30 for cassettes—include such activities as writing original endings to stories and designing a computer graphics poster. "The dramatic growth in these markets far outpaces the growth of print markets," explains Robinson from his Manhattan office, which with its brightly painted walls suggests a cheery high school principal's quarters more than a company president's.

This fall Robinson is launching *Family Computing*, Scholastic's first consumer magazine for adults in its 53-year history. Personal computing is hardly an untended journalistic market, with some 70 titles in the field at last count, but "unlike the others," says Robinson, "our magazine helps people understand computers from the beginning." *Family Com-*



Scholastic Inc. President Richard Robinson
A six-syllable word: diversification.

uting will be launched with 200,000 ubscribers signed up, and Robinson hopes that will expand to half a million in 1984.—**Walecia Konrad**

The homecoming

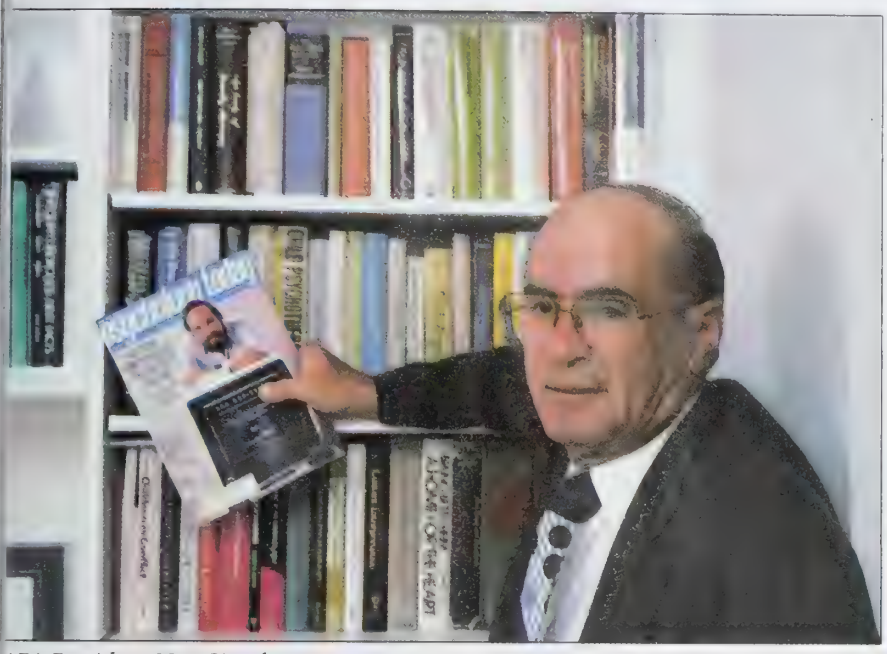
The American Psychological Association, new owner of Ziff-Davis' *Psychology Today*, had this little conflict. Aware that a sound mind ought to be in a sound body, the APA had to decide what to do with the lucrative tobacco and liquor ads that compose 43% of current advertising. Max Siegel, president of the APA, has decided to accept the world as he finds it. Cigarette and liquor ads will stay. "We have a standard of principles," Siegel says, "but we are not censors."

The APA will, however, toss out what Siegel calls "sleazy" classifieds, sexist advertising and promotions for mail-order diplomas. "None of that would affect our moneymaking prospects," he asserts.

The APA turned up as a buyer for Ziff-Davis' 16-year-old magazine after a search that lasted four years. The 850,000-subscriber monthly showed its last profit in 1980. It was on the block for as much as $24 million, according to trade gossip, but sold for only about $12 million—$3.8 million cash and $8 million in unfulfilled subscription liabilities.

Why would a man and an organization with no publishing experience want a moneylosing magazine? "The APA felt that we would like to have control over a magazine that purports to represent psychology," Siegel says. "People would call us and say, 'How could you run things like this?' when we didn't even own the magazine. *PT* is finally coming home."

Not all the board members of the APA agreed, though. The vote to buy *PT* could not have been closer—6 to 5. Among the nays was APA Treasurer Raymond Fowler, who thought that the projections for the magazine assumed that "something magical is going to happen to make the profit line suddenly start to go up."



APA President Max Siegel
No more "flimflam."

Siegel, long a professor of clinical psychiatry at Brooklyn College, Adelphi and now Florida Atlantic, disagrees, and thinks the magazine will break even this year. He dismisses much of the past editorial content as "flimflam." Says Siegel: "We want to provide information and education, not entertainment, in the magazine."

In the fallout of the controversial purchase, the publisher, Gerald Hotchkiss, was fired. And because the magazine will move to Washington, there may be editorial staff changes, too. The magazine may indeed be "coming home," as Siegel claims—but the road getting there may be rough.—**Christine Miles**

The racer

Will success spoil Japan? "Without question," says Ryoichi Sasakawa, one of Japan's best-known philanthropists and creator of its continuing motorboat racing craze. "There is a definite correlation between economic wealth and softening of the will."

A vigorous 84, Sasakawa keeps busy on behalf of the 19 nonprofit organizations he serves as chairman. They range from the Blue Sea & Green Land Foundation, which runs shipboard training cruises for high school students, to the Japan Volunteer Firemen's Association. Mainly, they are designed to give young people an alternative to what Sasakawa sees as "spiritual decay"—for example, the emergence of motorcycle gangs on Japanese streets. "I am very concerned about the future," he says.

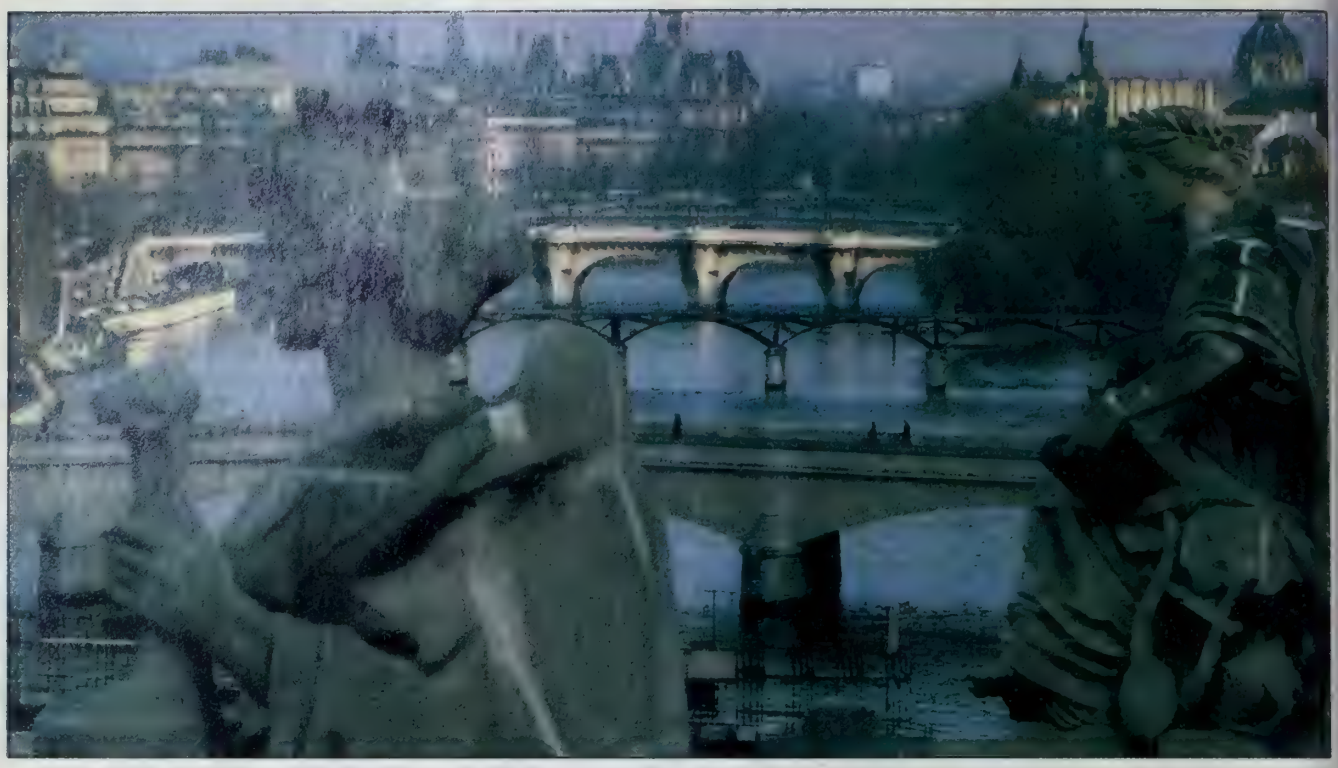
It is the concern of a man who has had his own problems with society. Though never brought to trial, Sasakawa spent three years in jail as a war criminal during the American occupation of Japan. Among many Japanese he has the reputation of a "kuromaku," a high-level fixer. The reputation springs from his success in making gambling on motorboat racing a legitimate business that now accounts for an annual turnover of better than $8 billion.

Some 2% or more of that take is now earmarked for the Japan Shipbuilding Industry Foundation, with R. Sasakawa as chairman. Most of the foundation's cash flow has gone to the Japanese shipping industry, but the pot has grown so rapidly that the foundation has become a major donor to the U.N. and other agencies outside Japan. Two years ago, it fathered the U.S.-Japan Foundation with a grant of $48 million.

Philanthropist Ryoichi Sasakawa
Economic growth, spiritual decay?

In New York recently to accept an award for financial aid he has given to the blind, Sasakawa saw world philanthropy as one way for Japan to recapture its soul. "We have prospered economically," he says, "but because of that we are destroying ourselves spiritually."—**Richard Phalon**

The Seine, from the Orsay metro station
The moveable feast goes on.



It is still far from cheap, but visiting the City of Light is less expensive now than it has been for years.

Personal Affairs

Edited by William G. Flanagan

Paris—when it sizzles

By Jean-Pierre de Lucovich

AH, THE FRENCH. Jean Cocteau, the author whose rapier wit was feared by friend and enemy alike, once termed his countrymen "Italians in a bad mood." Indeed, that mood is particularly dark these days, as evidenced by the anti-Mitterrand demonstrations by students and workers throughout the country—and especially in Paris. But if the City of Light is on your business or vacation itinerary, the sight of a demonstration might easily be forgotten after figuring out what Mr. Mitterrand's economic policies have done to the franc vis-à-vis the dollar.

Consider: Your buck now fetches about 7.5 francs, against less than 4 only four years ago. Even without inflation and various new taxes, Paris still isn't cheap, of course. But it is less expensive for Americans than it has been in years.

The luxury hotels long popular with Americans (the *Plaza Athénée*, the *Meurice*, the *Ritz* and the *George V*) now run about $150 for a single, about $200 for a double. (Note: The *George V* is now being snubbed by traditionalists because of its large Arab clientele.) But, for a change, why not try the recently spiffed-up *Bristol*, one of the best addresses in town at the moment? It features an excellent restaurant (two stars in the *Michelin*), swimming pool (rare in Paris) and lovely suites on a private garden. Another good choice is the *Crillon*, where you can sleep in an elegant, antique-filled suite, wake up and walk but a few steps to have breakfast on a terrace overlooking the Place de la Concorde. Its restaurant is now on a par with that of the *Bristol*.

The *Meurice*, ideally situated on the Tuileries Gardens, attracts some glitterati but is mainly the haunt of international businessmen these days. Its salons are just as beautiful as those of the *Ritz*. By the way, the *Espadon*, the restaurant of the famous palace of the Place Vendôme, has also been redone. It is very comfortable and pretty, but the cuisine is not up to that of the *Bristol* and the *Crillon*. If you prefer a smaller hostelry, *La Trémoille* is a nice, intimate hotel, well situated behind the *Plaza Athénée*, and is also a Trust Houses Forte property (like the *George V* and the *Plaza*), which allows you to

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Personal Affairs

sign the bill in any of the restaurants of these hotels.

The glitzy new *Nova Park* is a curiosity that, needless to say, was instantly detested by the French. It is ostentatious and done in dubious taste, but is extremely comfortable. It is easily the best-equipped hotel in Paris for businessmen. It has it all: telexes, bilingual secretaries, conference rooms, round-the-clock press information, complimentary Rolls-Royces and Mercedes reserved for the clients of the hotel, sauna, swimming pool, gym, bars, night clubs and . . . rich Arabs.

But, if you want something a bit more Parisian, try the Left Bank. *The Lenox*, on the beautiful and quiet Rue de l'Université (a 10-minute walk to Saint-Germain-des-Prés) is a lovely little hotel with a nice bar and very reasonable rates. The small suites with terraces on the top floor cost $70 per day, taxes and service included. Casual and elegant, the Lenox draws many movie and fashion people. Right across the street, *Princess Caracciolo's* boutique (she works with Mica Ertegun in New York and Paris) is worth a visit if you are looking for gifts. Note: In Paris, more so than in any other major city in Europe, the concierge in a first-class hotel should be able to get you anything you want: seats for a sold-out show, reservations in trendy—and full—restaurants, and tables in members-only clubs. Many businessmen select hotels because of the efficiency of the concierge. Good concierges are even said to be helpful to lonely travelers who hate to have dinner alone. (Such company can also be found through the personal ads of the *International Herald Tribune*, and the rates of these "executive assistants" and other "bilingual secretaries, excellent presentation" are $300 for two hours.)

In any case, you will definitely need the concierge to make reservations for you at any of the numerous three-, two- or even one-star restaurants (or those with no star at all). Take *Taillevent*, for example. There is a six weeks' wait if you want to have dinner there on a Friday night, four weeks on a normal weekday and one week for lunch. Why the rush, why the success? It has three stars in the *Michelin*, it is refined and elegant, and it is 20% cheaper than other restaurants in the same league. The owner, Jean-Claude Vrinat, looks just like one of his customers—double-breasted gray suit, custom-made shirt, spectacles and all business. Many Americans even write from home to make reservations.

An absolute must, while you can, is *l'Ami Louis*. M. Magnin, the owner and chef, is 84 years old and looks like a French chef in a 1950 musical shot on a Hollywood lot. The place is smoky and noisy, with dark-painted old walls, and the food is terrific. Foie gras, lamb, rib of beef, cèpes (large mushrooms) cooked with garlic, young partridge (in season)—you realize quickly that some very serious eating is going on here. When M. Magnin in toque, white beard and clogs comes out of his kitchen to say hello to a regular, you have the feeling that Maurice Chevalier is about to show up any minute.

Shopkeepers' protest
Unrest runs deep.

Student riot May 5
Grim reminders of 1968.

One of the best bargains in town is the *Gourmet des Ternes*, a bistro just as noisy as *l'Ami Louis* but with more reasonable prices. The menu here is typically French: poireaux vinaigrette (leeks), mackerel in white wine, pâtés and fabulous meat (the owner is also a butcher).

For nouvelle cuisine, which has become more or less classic now, try *Jamin, Guy Savoy, Les Semailles, Faugeron, Michel Rostang*. And, of course, *L'Archestrate*, a place that won't leave you indifferent. The chef, Alain Senderens, one of the pioneers of nouvelle cuisine, often comes up with superb inventions. It seems impossible to eat badly at *L'Archestrate*, but there is pretension here.

If food is not the only thing, one trendy bistro where the menu is good, the mood cheerful and the crowd fun to watch is *Chez Marie*, popular with publishers, actors, journalists and fashion people. *La Coupole*, in Montparnasse, is as always a good choice for a casual evening, especially on Sunday nights. (Although it is not usually done in Paris, a tip to the maître d' will help to get a table.)

Virtually everyone who wants to be seen frequents *Brasserie Lipp*, which is now a monument of Parisian life. But to get a table you have to confront owner Roger Cazes, who can be charming and is probably delighted to have you in his famous brasserie, but who also wants to have it his own way: He will give you a downstairs table whenever he feels like it. (No one dines on the second floor.) Keep smiling, show no impatience, and he will get to you.

Paris has suddenly rediscovered fish. *Prunier* used to be the place for poisson, and it is still worth a visit (its Art Deco ground floor dining room is outstanding), but many other top restaurants now specialize in fish, nouvelle cuisine style. *Le Bernardin*, owned by brother and sister Gilbert and Maggie LeCoze, is one of the best. It offers such inspirations as hot oysters with truffles and lobster with basil. Also on the top fish restaurant list is *Le Duc* in Montparnasse, *Bernardin*'s most serious challenger.

This trip to Paris should be the time you actually visit the Eiffel Tower. The second-floor restaurant, *La Belle France*, now boasts excellent service, better than decent food and a breathtaking view of the city through tinted bay windows. No stay in Paris would be entirely satisfactory without a visit to *Maxim's*. This Paris monument was bought recently by Pierre Cardin, who has plans for its future. *L'Impériale*, the bar on the first floor that used to serve as a predinner watering hole, has been redecorated (in *Maxim's* style, of course) and is now a restaurant where one can have supper after 11 p.m. every night except Sunday. The bar is still open for drinks before and after dinner. Wine bars have finally caught on in Paris. They are half bars, half restaurants and specialize in wines that can be ordered by the bottle or by the glass. The food is usually good but simple—country ham, pâtés, smoked salmon, salads, cheeses. Prices for the wines start at 80 cents and go up to $5 or $6 a glass. *L'Ecluse* is one of the best wine bars in town.

As for nightlife, all clubs are sup-

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SAFETY IS A SNAP

RENAULT

THE ONE TO WATCH

Personal Affairs

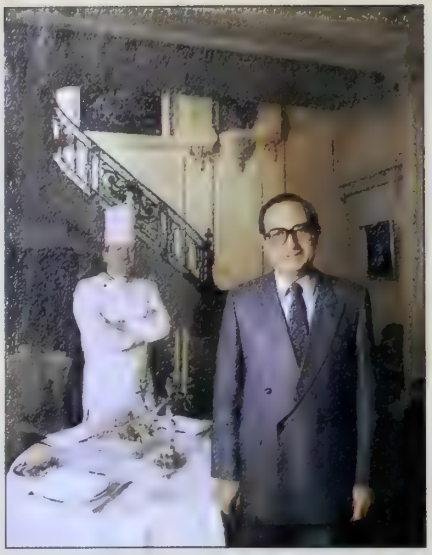
posedly private, but a call from someone you know in Paris or from the concierge of your hotel will let you in. The two top clubs are still *Castel's* and *Régine's*. *Castel's* is more casual and has two restaurants; *Régine's* is rather dressy and formal. (Drinks run $12 and up.)

New Yorkers shopping in Paris can see, in many windows, the same button-down shirts, loafers and casual wear they saw last week on Madison Avenue or at Bloomingdale's, but with a serious difference. They are 50% more expensive. You may want to check out the unusual, in a place like *Hilditch and Key*. (It was founded by Englishmen in 1899 but is independent of its "cousin" in London.) It features beautiful cashmere sweaters (26 different colors) made specifically for the house. The manager, M. Bertoni, will show you his exclusive squares (70% cashmere, 30% silk), which, over the years, have become collectors' items, and extraordinary robes made in Real Ancient Madder Silk ($800). Custom-made shirts cost $110. Another worthwhile stop is *Charvet*. Old customers will hardly recognize their old Charvet. The shop has moved from 8 to 28 Place Vendôme and now fills a whole building, with the boutique downstairs. One floor is dedicated to shirts ($100 each, custom-made; 20% cheaper ready-made). It also has beautiful ties and a good women's department. *Lobb*, the bootmaker, has become a legend in Paris, where it has been established since 1901. To have a pair of shoes made here is truly an experience. But the price is, too: $1,000 (plus $115 for the boot trees). Your shoes will be ready in 12 months. But Lobb has also turned to ready-to-wear footgear, and one can sport the famous name now for only $170.

While you're in the neighborhood, drop by the *Davidoff* shop on Avenue Victor Hugo and buy some marvelous Cuban cigars.

If you run out of reading material, *Galignani* stocks a large selection of English and American books, and anything not in stock can be ordered. It has been in operation for over 150 years.

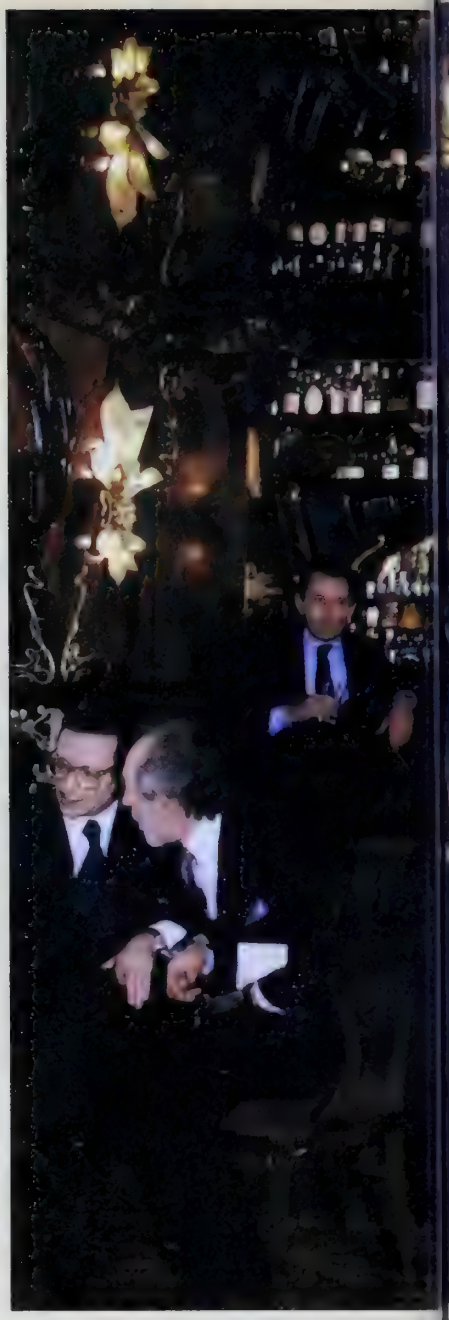
Here are some representative rates and costs:



Owner Jean-Claude Vrinat at Taillevent
A six-week wait for Friday night.

Princess Caracciolo's boutique
The stronger dollar helps, but. . . .

A private terrace of the Hotel Crillon
Drinking in the City of Light.



L'Impériale, the upstairs bar at Maxim's, has recently been redecorated.

Hotels

(Rates should be checked very carefully. All hotels must, by law, charge 18.6% tax on your room bill, but not all of them quote their prices with the tax included.)

Bristol, 112 Faubourg Saint-Honoré 75001 (266 91 45). Single $100, double $150 (plus taxes, service included).

Crillon, 10 Place de la Concorde 75008 (296 10 81). Single $140, double $170 (taxes and service included).

Plaza Athénée, 25 Avenue Montaigne 75008 (723 78 33). Single $140, double $150 (taxes included, 15% service additional).

Meurice, 228 Rue de Rivoli 75001 (260 38 60). Single $165, double $200 (taxes and service included).

George V, 31 Avenue George V 75008 (723 54 00). Single $140, double $200 (taxes included, 15% service additional).

Ritz, 15 Place Vendôme 75001 (260 38 30). Single $150, double $190 (taxes included, 15% service additional).

La Trémoille, 14 Rue de la Trémoille 75008 (723 34 20). Single $100, double $150 (taxes included, 15% service additional).

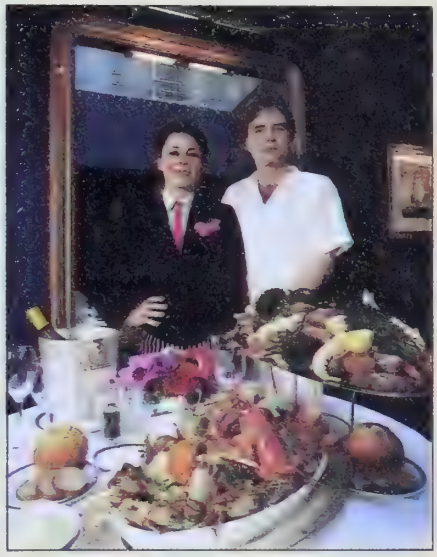
Lenox, 9 Rue de l'Université 75007 (296 10 95). Single $40, double (suites) $70 (taxes and service included).

Nova Park, 51 Rue François Ier 75008 (562 63 64). Single $150, double $180 (taxes and service included).

Since it was acquired by Pierre Cardin, Maxim's has regained cachet even for locals. On Friday nights, it's black tie.

Complimentary limos at Nova Park Hotel
Glitz aside, businessmen love it.

L'Ecluse, a smart new wine bar
Sampling vintages by the glass.



Le Bernardin, where meat is unknown
Try the lobster with basil.

Restaurants

(Prices include wine and service.)

Taillevent, 15 Rue Lamennais 75008 (561 12 90), no credit cards, $50 to $60 per person. *L'Ami Louis*, 32 Rue du Verbois 75003 (887 77 48), $60 per person. *Le Gourmet des Ternes*, 87 Boulevard de Courcelles 75008 (227 43 04), $15 to $20 per person. *Jamin*, 32 Rue de Longchamp 75116 (727 12 27), $50 per person. *Guy Savoy*, 28 Rue Duret 75116 (500 17 67), $50 to $70 per person. *Faugeron*, 52 Rue de Longchamp 75116 (704 24 53), $45 per person. *Les Semailles*, 3 Rue Steinlein 75018 (606 37 05), $45 per person. *Rostang*, 20 Rue Rennequin 75017 (763 40 77), $45 per person. *L'Archestrate*, 84 Rue de Varenne 75007 (551 47 33), $70 per person. *Chez Marie*, 25 Rue Servandoni 75006 (633 12 06), $20 per person. *Prunier-Traktir*, 16 Avenue Victor Hugo 75116 (500 89 12), $50 to $60 per person. *Le Bernardin*, 18 Rue Troyon 75017 (380 40 61), $45 per person. *L'Ecluse*, 15 Place de la Madeleine 75008 (265 34 69), $16 per person. *Club Princesse (Castel's)*, 15 Rue Princesse 75006 (326 90 22); restaurant: $50 per person; drinks: $12. *Régine's*, 49 Rue de Ponthieu 75008 (359 21 13); restaurant: $50 to $60 per person; drinks: $12. *Chez Vong* (Chinese), 27 Rue du Colisée 75008 (359 77 12), $25 per person. *La Belle France* (Eiffel Tower) (555 20 04), $22 per person.

Shopping

Hilditch and Key, 252 Rue de Rivoli 75001 (260 36 09).

Charvet, 38 Place Vendôme 75001 (260 30 70).

John Lobb (at Hermès), 24 Faubourg Saint-Honoré 75008 (265 24 45).

Boutique 22 (Davidoff), 22 Avenue Victor Hugo 75016 (501 81 41).

Anne Caracciolo, 16 Rue de l'Université 75006 (261 22 22).

Petrossian, 18 Avenue de la Tour Maubourg 75007 (551 59 73).

Saint Laurent Rive Gauche, 12 Place Saint-Sulpice 75006 (326 84 40).

Galignani, 224 Rue de Rivoli 75001 (260 76 07).

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NEW ISSUE

May 27, 1983

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Exchangeable for Common Stock of

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The Debentures are exchangeable for shares of Common Stock of Mobil Corporation at any time on and after the date of issuance and prior to the stated maturity, unless previously redeemed, at an exchange rate of 25 shares per $1,000 principal amount of Debentures (the equivalent of $40 per share), subject to adjustment in certain events and subject to the Corporation's right to pay cash equal to the value of shares for which any Debentures are exchanged.

Price 100%

plus accrued interest from June 2, 1983

Copies of the Prospectus may be obtained in any State in which this announcement is circulated only from such of the undersigned as may legally offer these securities in such State.

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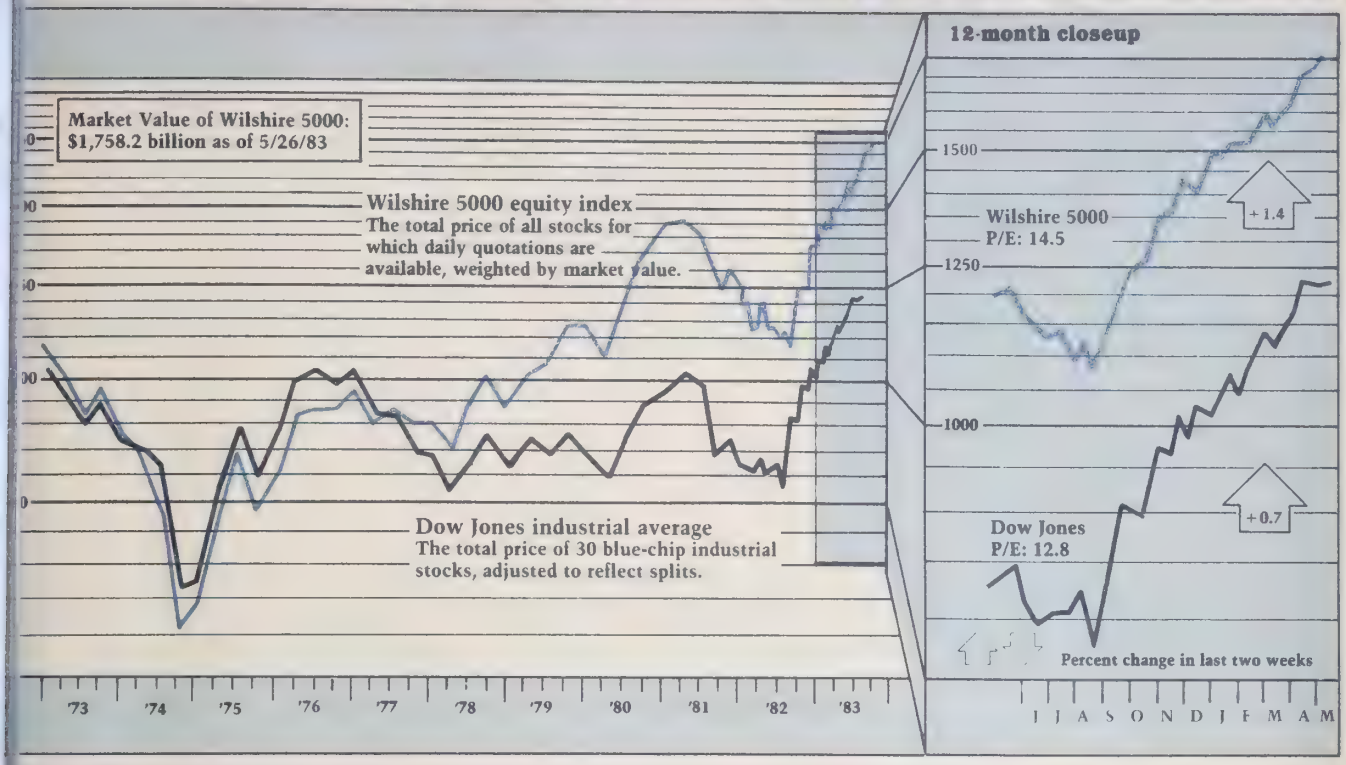


When will it stop? Trading volume has begun to pick up strength. Despite the increasing activity, however, the Dow stayed virtually flat over the last four weeks. With the shares of many mature blue chip firms already pushed to high levels and Uncle Sam waiting in the wings for his share of capital gains, many investors are risking some of their newfound profits in "concept" stocks. Low-priced shares, perhaps because of their inherent leverage, have become big favorites. Over the last four weeks issues trading below $4 gained 18.1%, while their higher-priced counterparts advanced 4.4%. Small firms, up 18.5%, high-growth companies, up 16.3%, and high volatility issues, up 14.9%, were also in vogue.

The major indexes reflect Wall Street's speculative atmosphere. During the last month the Dow industrials gained only 0.3%, and the NYSE was up 2.3%. NASDAQ and Amex issues, meanwhile, advanced 7.1% and 9.5%, respectively. The Wilshire index—including almost 5,000 securities for which price quotes are available—shows that the market as a whole moved ahead 3.2%. This translates into an increase in market value of more than $70 billion. And the P/E of the Wilshire, now 14.5, is at its highest level since FORBES began tracking this figure late last year.

Close-up On The Equity Markets

Performance of six leading indexes

Percent change	Wilshire 5000	Forbes 500[1]	Dow Jones industrials	NYSE Composite	Amex Market Value Index	NASDAQ Composite
in last 4 weeks	3.2	1.5	0.3	2.3	9.5	7.1
in last 52 weeks	51.1	46.2	48.3	47.5	74.4	74.6

Stock performance based on five key investor yardsticks

Percent change	Company size		Volatility[2]		P/E multiple		Dividend yield		Growth profile[3]		Share price	
	large	small	high	low	over 25	under 5	over 7.5%	none	high	low	over $40	under $4
in last 4 weeks	4.4	18.5	14.9	5.8	12.7	13.4	4.7	14.6	16.3	4.1	4.4	18.1
in last 52 weeks	54.0	140.7	133.9	57.0	96.4	144.6	49.1	143.9	146.9	58.3	67.1	131.3

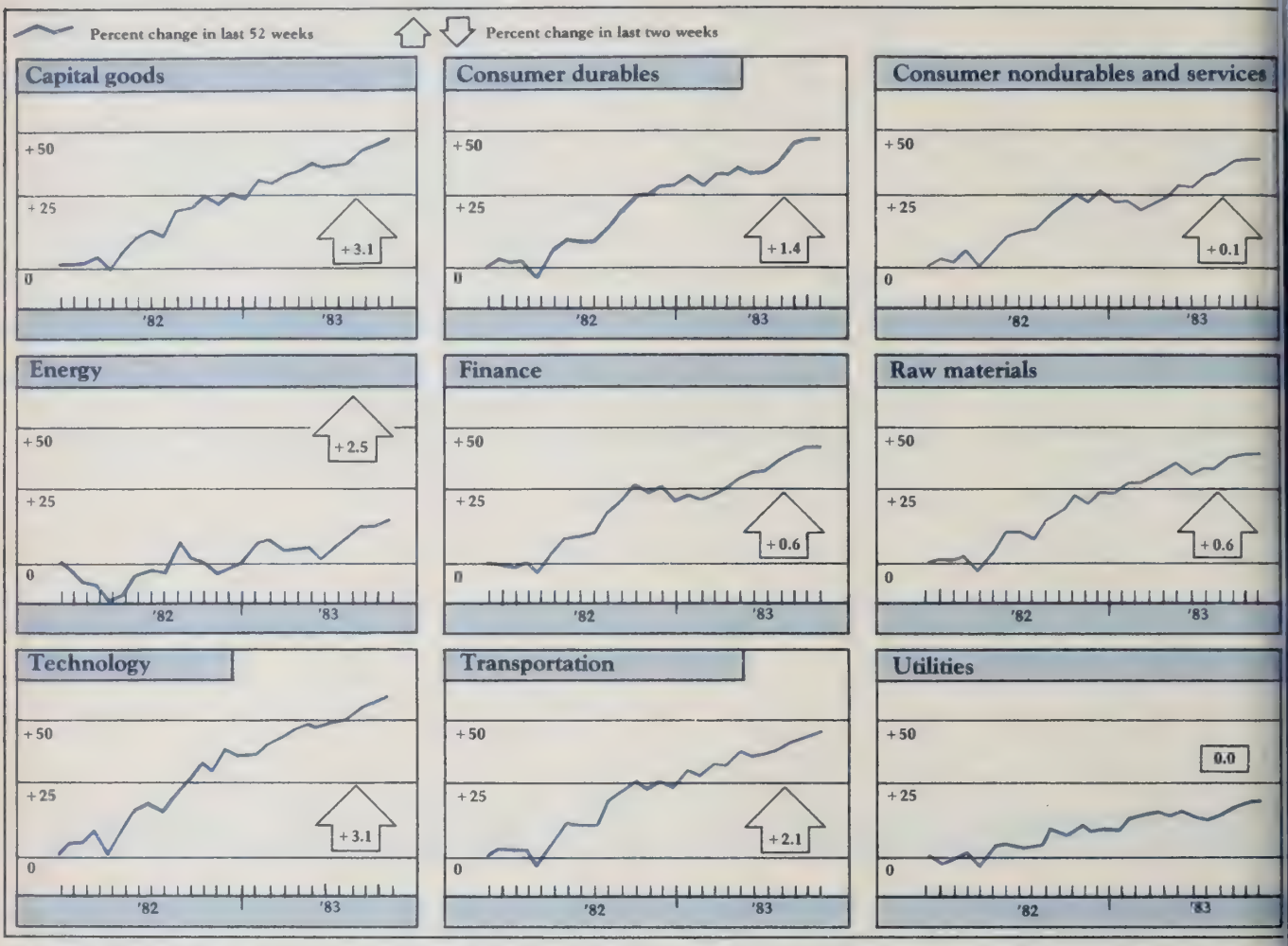
[1] Based on sales.
[2] A stock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations, low-volatility issues are more stable.
[3] A quantitative evaluation of a stock's growth image, determined by Wilshire Associates.

Note: All data for periods ending 5/26/83. Prepared by Wilshire Associates, Santa Monica, Calif.

Where The Action Is

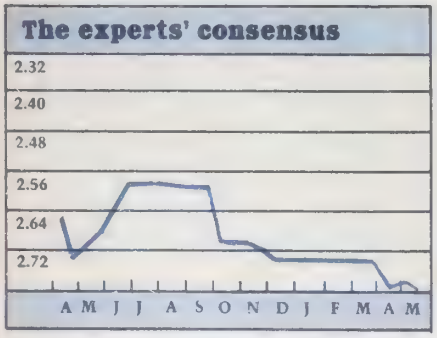
Emotional rescue. Investors kept betting on a recovery by buying into capital goods, transportation, energy, consumer durables and technology. But the strength of the oils was even more impressive. During the last two weeks they advanced 2.5%. This gain was undoubtedly supported by Diamond Shamrock's tender offer for Natomas. Not surprisingly, merger speculation also helped push up a number of other energy issues. Once again investors got a reminder of the potential undervaluation of this group—especially compared with the rest of the market.

The strongest groups were capital goods and technology. Technology stocks also show the greatest 52-week gain, 87.7%, whereas energy issues lag with only a 17.3% advance.



What The Analysts Think

Standing by their guns. It has been more than four weeks since there has been a change in analyst buy/sell rankings of the nine Wilshire sectors. The analysts' top choice—utilities—has been a market laggard since early March. But third- and fourth-ranked capital goods and technology led the market during the last two weeks.



Rank	Sector	Current opinion	Rank 2 weeks ago	Rank 4 weeks ago
1	Utilities	2.63	1	1
2	Energy	2.73	2	2
3	Capital Goods	2.78	3	4
4	Technology	2.79	4	3
5	Raw materials	2.79	5	5
6	Finance	2.82	6	6
7	Transportation	2.86	7	7
8	Consumer nondurables	2.87	8	8
9	Consumer durables	2.92	9	9

Opinion ratings are ranked on a scale of 1 (strong buy) to 5 (strong sell). Data reflect the views of 200 institutional analysts. The consensus of opinion graph is the composite rating of 1,200 stocks, while the sector breakdowns correspond to industry groups graphed above. All figures are weighted for market capitalization.

Note: All data for periods ending 5/26/83. Prepared by Wilshire Associates, Santa Monica, Calif.

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"Do you have one that can help me decide which is the one for me?"

You don't need a computer to decide what kinds of people want to buy a computer. They're people with a penchant for knowing more and a desire to get things done. The kinds of people who read The New Yorker. Which helps explain why so many computer manufacturers number The New Yorker among their most effective advertising calculations. Yes, The New Yorker.

THE NEW YORKER

Take a struggling firm, dilute future earnings by offering millions of new shares, and what happens? The stock shoots upward.

Do you believe in magic?

By Paul Bornstein

On Feb. 25, Chrysler registered an offering of 10 million new shares and the market didn't even flinch. On the contrary, Chrysler stock went from 14⅞ the day after registration to 16⅝ on the offering date. Not only that, the demand was so great that the firm unloaded 26 million rather than the 10 million shares originally announced. Four weeks later Chrysler was up almost 55%.

American Motors turned the same trick. An enlarged offering on Apr. 12 was quickly sold out at 5⅞. AMC's total offering diluted the stock by 44% and The Street doesn't expect the company to return to profitability until 1985. Despite that fact, four weeks later the stock was ahead almost 79%.

Traditionally, mere word of a large new equity financing is enough to depress a stock (the new supply overhangs the market), even though the proceeds from the offering are often used to pay off debt or finance new projects. But in this emotion-filled bull market, tradition—bearish tradition, anyway—doesn't hold.

Forbes found 57 companies that used public offerings in March or April to increase their shares outstanding by 10% or more. The first group in the table below shows ten firms with the greatest upward movement four weeks after the offering date.

Altogether, about half of the 57 were at higher prices on offering day than they were on the day they registered their new issue (roughly when it becomes public knowledge). It is true that many did fall briefly the next market day, but the majority quickly recovered from there. Seventeen actually rose the next day on the news.

The second group shows how strong even the stocks that did decline were after the offering. The top five gainers are listed.

The last column in the table, "Movement relative to S&P's 500," relates stock price to market from the day after registration to four weeks after the offering. You can see how enthusiastically investors received the news that big, fresh supplies of shares were around. Health services firm Comprehensive Care, the champ in this category, outperformed the S&P's 500 by an 18.5-to-1 margin.

With this kind of frenzy in the secondary-issue marketplace, it is not hard to see why more and more firms are jumping in. Would cash-hungry Ford be far behind AMC or Chrysler if you were in charge? ■

Another bull story

Of the 15 stocks below, 14 were in such demand that they outperformed the S&P's 500 by a wide margin despite significant dilution from new equity offerings. The average relative gain was 5.4-to-1. Note that the first 10 issues even showed gains from the day after registration to the day of the public offering.

Company	Business	Date common registered	Date common offered	Common stock price: day after registration	Common stock price: at offering	Common stock price: 4 weeks after offering	% change from offering date	Shares offered (thousands)	Existent stock dilution	Movement relative to S&P's 500*
Group I										
American Motors	automotive	3/23	4/12	5⅞	5⅞	10½	78.7%	24,785	44%	9.5
Chrysler	automotive	2/25	3/29	14⅞	16⅝	25¾	54.9	26,000	33	7.9
Applied Materials	semicond equip	3/31	4/8	29¾	30¼	39¾	31.4	560	10	3.8
North Atl Inds	electronics	3/21	4/12	12⅜	14	17⅞	27.7	375	21	4.4
Airborne Freight	freight forwarding	3/31	4/15	19¾	20⅛	25¼	25.5	900	19	3.4
Dayton Malleable	metal casting	3/28	4/21	24	26¼	32¾	24.8	1,300	67	5.3
Telesphere Intl	hotel phone acct sys	3/31	4/20	15⅛	15¾	19½	23.8	2,000	26	4.1
Orion Pictures	entertainment	2/9	3/31	18¼	19½	24	23.1	2,000	29	3.0
Standard Logic	computer equip	2/7	3/24	4⅜	5	6⅛	22.5	1,250	36	3.9
Genetic Systems	medical research	3/11	4/7	9¾	9⅞	12	21.5	2,220	16	2.6
Group II										
Manage Sci Am	computer software	3/30	4/14	23	21	29¾	41.7	2,500	18	4.0
CompCare	health care svcs	4/15	4/21	29	28	36½	30.4	1,300	13	18.5
UTL	electronics	3/31	4/20	37	33½	43¼	29.1	450	24	2.4
Lockheed	aerospace	3/18	3/23	97½	95	116½	22.6	3,000	17	3.1
Possis Corp	machinery	3/7	4/19	11¼	8¾	10½	20.0	275	20	neg

*Stock movement from day after registration date to four weeks after offering date, relative to performance of the S&P's 500 neg: negative.

Sources: Wilshire Associates; Standard & Poor's; Forbes

'ou heard it right. Today they're gossiping about mutual funds at cocktail parties.

Suddenly sexy

By Barbara Rudolph

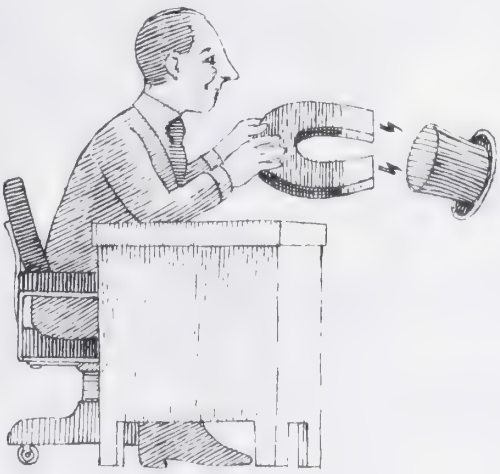
IT'S A PERPETUAL PROBLEM for mutual fund marketers: how to attract richer, more sophisticated investors. "Funds were always the most sexless things around," says tan Lipstadt, a Massachusetts money manager. "People like to talk about tock options and futures, how Genntech went from 2 to 50. There sn't much excitement associated vith mutual funds."

Well, there is now. Money is pouring in, and not just from the widows and orphans. The average account balance in non-money-market funds was $9,382 at the end of last year, according to the Investment Company Institute. That's only a 22% increase over 1981, but the bare figure tells only a part of the story.

After all, the industry got a bundle of new IRA accounts and, since initial investments there cannot exceed $2,000, this throws the average off. At Vanguard Fund, Chairman Jack Bogle estimates that bigger investors, those with accounts of $25,000 and above, currently represent about 50% of all noninstitutional stock fund shareholders. Just a year earlier that figure was only about 30%.

What is behind the more substantial investor's change of heart? "Funds are more socially acceptable now, even glamorous," says Vic Kramer, head of retail marketing for Fidelity. That's hardly a dispassionate observation, but it may be true. One reason: Outstanding performers, such as Fidelity's Magellan Fund, have given the industry its own luster. Magellan's customer base, in fact, suggests that richer individuals are particularly hungry for aggressive growth stock funds. In mid-1982, Magellan had 40,000 shareholders, with an average account of $5,000. Now there are 173,000 investors, with the average non-IRA account at $10,200.

Marketers haven't done anything special to attract wealthier shareholders—and they may not need to. Today's promotion budgets are fat, and awareness of the industry is usually high. Vanguard Fund is selling shares in supermarkets, and Fidelity is experimenting with airport kiosks. "That catches everyone's eye, and rich guys fly planes too," says Fidelity's Kramer.



Like a lot of folks now moving into the stock market, many equity fund investors got used to mutual funds as money market investors; the money market funds had a more sophisticated image than the equity funds. These shareholders may well be wealthier than their mutual fund counterparts. After all, the average money fund balance is $15,000, well above the equity fund figure. Thus the industry can promote directly to thousands of potential investors who might never before have considered its products.

There's a by-product of this trend that's good for everyone. As average account size increases, shareholders benefit financially. That's because they pay all expenses, and it costs about $20 annually to service a typical account—whether it holds $2,000 or $200,000.

The richest customers, of course, are institutional, not individual. Funds traditionally handle only 10% of the money in small pension plans—accounts of between $5 million and $10 million. One reason that share didn't grow is that pension managers traditionally avoided funds "because they had an ego thing about browbeating portfolio managers on a quarterly basis," explains Nashville investment consultant Steven Gregory.

Now even that may be changing. The ICI estimates that non-money-market funds hold $4.9 billion in pension and profit-sharing money, not including IRA and Keogh accounts. That's a gain of $1.5 billion over the past year. "Today institutional investors will forego some handholding in order to get better performance," says Catherine Higgins, president of Buck Pension Fund Services, Inc.

Small shareholders, however, have reason to worry if pension funds become too big a factor in the fund industry. "Part of the reason that mutual funds have performed better than bank pooled funds is that mutual fund managers don't have to spend as much time on client relationships. They have an unencumbered environment and are able to focus their energies on investing," says Edgar Barksdale, a partner at Connecticut-based pension consultants Rogers, Casey & Barksdale.

These days, of course, fund managers seem only to want bigger and bigger accounts. But some people have a nagging worry. "I see all these ads touting our recent performance, and I think they must be creating false expectations," says Vanguard's Bogle. The danger is that, when the bull market falters, the industry's rich new investors might leave just as quickly as they arrived. ■

You are not a wealthy developer, a Wall Street whizbang or a large institutional investor. Can ordinary investors throw out managements?

Shoot-out at Rorer Gulch

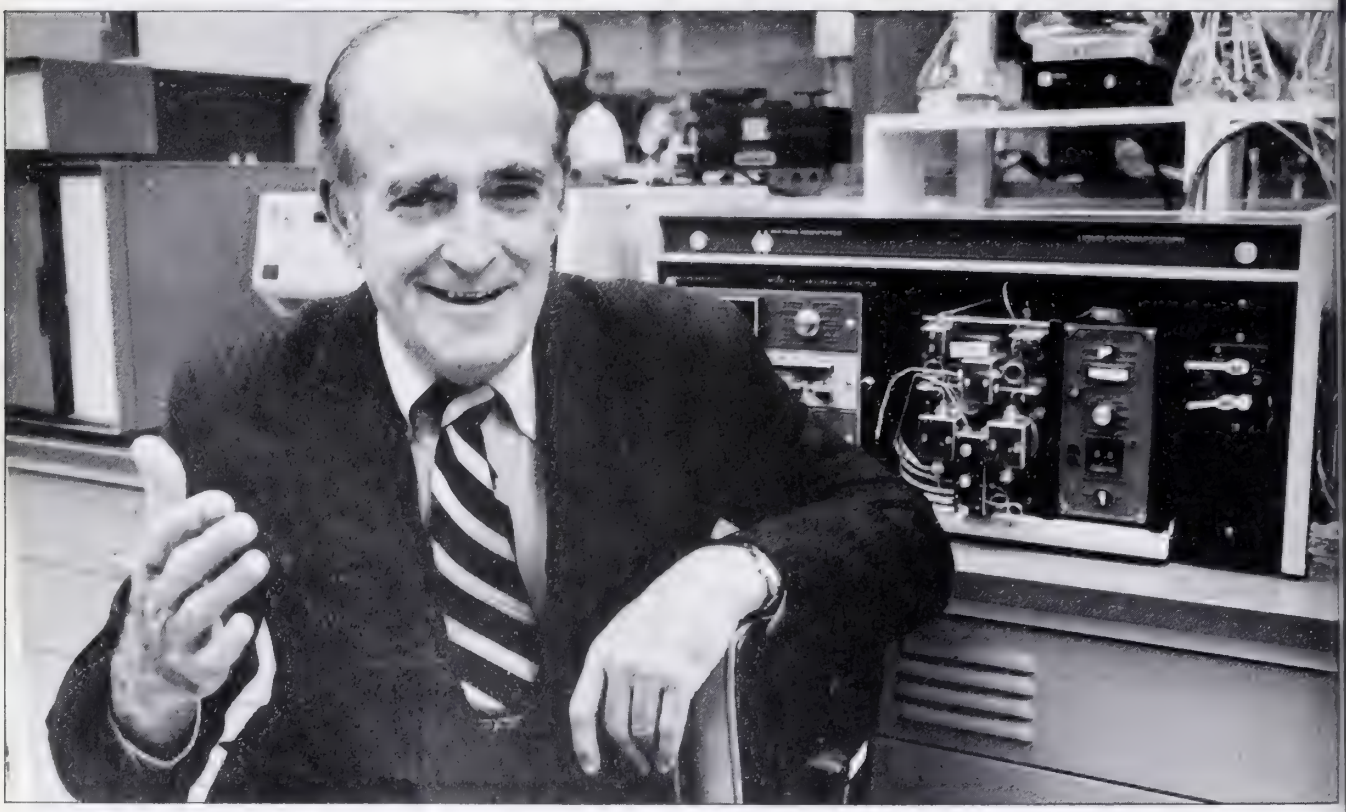
By Jean A. Briggs

JOHN ECKMAN, 63, chairman and CEO of $400 million (sales) Rorer Group, is testy these days. With good reason: Oppenheimer & Co. is trying to sell his pharmaceutical company, not only without his permission but against his will.

No proxy contest for control of Rorer has surfaced—yet—as at GAF, Trans World Corp. and Louisiana Land. But a group of shareholders who own over 13% of the company have hired Oppenheimer to find a buyer. Eckman says he began hearing of it last spring, but the group didn't go public until November, when it filed 13D forms with the SEC. Rorer retained Wachtell Lipton, a well-known New York law firm specializing in takeovers, and promptly took the group to court.

Eckman, however, is no Jesse Werner, the apparent loser in GAF's noisy proxy fight, who had richly feathered his nest while letting his company run downhill. Eckman's contract is modest by comparison with Werner's. His annual salary, for example, is $300,000, compared with Werner's $500,000. His company's record, unlike GAF's, is not just respectable but superior. Return on equity has averaged 22% over five years compared with 20% for the pharmaceutical industry as a whole. Sales have grown 15% a year, on average, since the company divested itself of its Amchem division in 1977. True earnings are still below their 1980 peak of $1.90 per share and probably will be again this year, but Eckman has good explanations—foreign currency translations, the packaging crisis following the Tylenol deaths, increased R&D spending.

So what's with the dissident shareholders? Greed for a takeover premium, most likely. The stock has been hitting new highs recently, but it has normally traded in a fairly narrow range between the high teens and the mid-20s. "I should have used it as a trading stock, not as a growth stock," grouses one owner. The company has been a perennial takeover candidate, as Eckman says, "for obvious reasons. We come up on every investment banker's screen—we are in the health care industry, we have a clean balance sheet, and we're small enough to be affordable."



John Eckman of the Rorer Group
A knack for acquiring and fending off would-be acquirers.

Is the future of Turkey any of your business?

photo Adams/Gamma-Liaison

Does your company have—or want—business interests in Turkey?

If so, you should know about an opportunity to enhance your prospects for doing business in this revitalized and strategically important nation.

On September 11-13, 1983, a select group of international businessmen, bankers and investors will meet in Istanbul to confer with key Turkish government officials. They will receive a thorough briefing on new opportunities developing in Turkey and discuss the roles their companies can play in the country's economic future.

The occasion? **The Turkey Forum: Opportunities for Trade and Investment.** This meeting is sponsored by the government of Turkey and Institutional Investor, Inc., publisher of Institutional Investor magazine and organizer of numerous conferences and seminars for the global financial community.

This forum provides a significant opportunity for one of your company's senior executives to...

- meet personally with top Turkish ministers and officials who control foreign business activities in their country;
- hear firsthand the government's views on Turkey's financial and political conditions, current borrowing and debt management plans;
- find out which industries Turkey has targeted as growth areas, what incentives and credit programs exist for foreign investors and what are the best ways to enter the Turkish market.

Turkish officials participating at the forum will include the following: His Excellency Sermet R. Pasin, *Minister of State;* His Excellency Dr. Ilhan Oztrak, *Minister of State;* His Excellency Adnan Baser Kafaoglu, *Minister of Finance;* His Excellency Mehmet Turgut, *Minister of Industries and Technology;* Tevfik Altinok, *Secretary General of the Treasury;* Osman Siklar, *Governor of the Central Bank of Turkey;* Husnu Dogan, *Head of the Foreign Investment Department.*

Several noted international experts will also address the forum, including Alexander M. Haig, former U.S. Secretary of State.

There is no registration fee for *The Turkey Forum*. However, attendance will be limited to 100 business and financial executives in order to assure the most productive exchange of ideas and information. So a prompt response will be important to secure your invitation.

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And, at the same time, you can take some steps to help build your own future in Turkey as well.

Institutional Investor

For more information about how your company can participate in **The Turkey Forum: Opportunities for Trade and Investment,** contact: M. Van Gelder, *Managing Director: The Turkey Forum,* Institutional Investor, 488 Madison Ave., New York, N.Y. 10022, (212) 832-8888, Telex: IISI 234988 (RCA), INSINV 428162 (ITT), INSINVI 66385 (WUI)

Investment bankers aren't the only ones who talk takeover. Eckman says that in every year of the past 20 at least one company has approached him about acquiring Rorer. In fact, he says, every major pharmaceutical and chemical company in the U.S. and a good many in Europe have coveted Rorer. They all like what Rorer could do for them. But what could they do for Rorer? Management argues—and with logic—that there is no compelling reason to sell a company that is doing that well on its own.

Some dissident stockholders, however, complain that Eckman turns away potential buyers before they can make proposals. They say that 22% on equity and a 15% growth rate aren't enough for a company like this, that its potential is greater. Their attitude toward Eckman is kind of "What has he done for us lately?"

When Eckman came to Rorer 20 years ago, it was a one-product company. Maalox, developed by Gerald and Herbert Rorer, sons of the founder, was a wild success. But what else could the company do? Eckman began diversifying. His goal, which he believes he has achieved, was to keep Maalox growing while reducing its percentage of total revenues.

So he made acquisitions—usually of small, privately held companies and almost always for stock. The most recent was Kremers-Urban Co., a $25 million purchase for stock that puts Rorer into the cardiovascular drug business. The Rorer stockholders who have hired Oppenheimer are nearly all people who got their stock in acquisitions. Now they complain that the company looks good just because of the constant stream of acquisitions.

Who are these dissidents? They are not odd-lotters or total outsiders, but neither are they really major owners. One is George Behrakis, one of the founders of Dooner Laboratories, which makes drugs for treating asthma and which Rorer acquired in 1977. "Our product was number one in the market when we sold out, but it's been surpassed by Key Pharmaceuticals' product," he says. "Rorer should be a $600 million company by now"—50% larger than in fact it is.

Behrakis, who now owns a small company called Muro Pharmaceutical, believes marketing is Rorer's key problem. Rorer sells its pharmaceuticals with a sales force of 400 so-called detail men, who convince doctors to prescribe Rorer products. But some Rorer products, notably Maalox, are sold without prescription over the counter. "The sales force is small relative to the competition," says Behrakis, "and it's trying to do two different things. Some companies, such as McNeil [owned by Johnson & Johnson], are split into two different marketing efforts, one for doctors and one for consumers."

The question now is not who's right but how much leverage the dissidents have. Probably, not much.

For instance, management, new contracts in hand, sought and received shareholder approval for a 66% increase in authorized shares. Eckman denies he had any specific purpose in mind, but new shares certainly could be useful in a takeover battle. They could be issued to make a counter offer for any would-be acquirer, for example, or to make an acquisition large enough to move the company out of target range.

Eckman and five other Rorer executives have also signed contracts guaranteeing their current salaries and benefits for three years if 30% of the company passes into hostile hands.

Management, as usual, has most of the cards. It even has the bull market going for it. With Rorer stock hitting new highs, potential acquirers may lose interest, and the bitterest shareholders may sell out.

But if the insurgents don't have a strong case or a strong hand, they do have the tide running with them. As the Superior Oil, TWA and GAF cases clearly show, corporate managements can no longer sneer at stockholder complaints and count on mass passivity to keep them in power. ■

The Money Men

Who pays big for wonder stocks? The same people who wouldn't touch them when they were cheap, says Mark Boyar.

He'll take the low road

By William Baldwin

Beneficial Standard Corp. is a stodgy insurance company with falling earnings and a mediocre return on assets. So why does Mark Boyar put it on the recommended list of his investment newsletter? One of the favorable indicators, says the 40-year-old Boyar, is that Beneficial's founder and controlling stockholder is 93.

Seems like an odd way to approach security analysis. Boyar is interested not in Beneficial's return on assets but in the assets themselves: a life insurance company that could probably be sold for a premium over book value, plus a collection of real estate on the books for a nominal sum but worth perhaps $20 per Beneficial share. Boyar says the company would bring more than twice its present $25-a-share market price in a merger. The founder shows no interest in ever selling out, but chances are he will not outlive Boyar.

This logic is disarmingly straightforward: Figure out what a business would be worth to an acquirer. "That's the way investors should look at any stock. Buy only if you feel comfortable owning 100% of the company at that price," says Boyar, echoing thoughts of such smart investors as Warren Buffett and the late Benjamin Graham. There's no secret, then, to focusing on theoretical breakup values. But with all the panting after quarterly earnings, few people have the discipline to do it.

Wall Street, in short, likes hot stocks: the Wal-Marts, at 35 times earnings; the Digital Switches, at 90 times; and takeover candidates only if the tender offer is coming next week. Boyar's tips, by contrast, are lukewarm at best and take years to mature. "Most investors don't have the patience," he says.

Ringing Out the News of Business Friendships that Really Work

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The Money Men

Most investors can't afford Boyar's *Asset Analysis Focus* newsletter, either. It has a circulation of 112, and for a subscription he asks $16,000 a year in brokerage commissions. Boyar makes his money by clearing the trades through other Wall Street houses at a discount.

All this comes naturally. Boyar graduated from C.W. Post College, quit law school to be a stock analyst and left a now-defunct securities firm to start his business in January 1975. The market was depressed then and Wall Street jobs scarce, but bargains of the sort Boyar hunts for abounded. These days Boyar won't talk about his income, which also includes fees for $25 million he has recently taken under management. Boyar, however, appears to be taking in close to $1 million a year, after clearing costs but before salaries for seven assistants and rent on sparsely furnished Manhattan offices.

How are the clients faring? Of the 147 companies Boyar has touted since 1975, at least 42 have been the subject of liquidations or tender offers. Putting a performance number on a subscription service is not easy, but a random sample by FORBES of the recommendations shows an average 23% compound annual gain during the time they were on Boyar's list. The average, moreover, excludes one lucky item that would have distorted the sample: Western Publishing, which climbed 46% because of a tender offer two months after Boyar mentioned it.

Not surprisingly for an analyst who once covered real estate and is preoccupied with liquidation values, Boyar turns up a lot of hidden-asset plays. Among them: Perini, the construction company, has ten blocks of downtown San Francisco and 1,400 acres in Palm Beach (Fla.) County. Cone Mills has a lot of cloth sitting around, especially if you add in the LIFO reserve (a component of inventory that shows up in the footnotes). Bear Creek, the Harry & David fruit-basket outfit, has a juicy mailing list. MEM Co. has the English Leather deodorant trademark and a load of liquid assets. Trico has a firm grip on the replacement-windshield-wiper-blade market, and a portfolio of auto stocks on the side.

Analyst Mark Boyar
Finding bargains in fruit baskets and windshield-wiper blades.

Boyar looks at earning power, too, but rarely by inspecting the bottom line. "Cash flow is more important to us than earnings per share," he says. "A lot of companies don't give a damn about earnings. Take Wrather Corp. His [Chairman J.D. Wrather Jr.'s] stated philosophy is, 'I want to build up an asset-rich company.' One day he will sell out."

Boyar ticks off Wrather's assets, which include the Disneyland hotel, rights to reruns of *Lassie* and *The Lone Ranger*, oil and gas wells, and real estate near Los Angeles that houses some peculiar tourist attractions such as Howard Hughes' flying boat, the *Spruce Goose*. Reported earnings are miserable because of large interest outlays; Wrather has borrowed against cash-generating properties to finance new projects that aren't yet profitable. Boyar, valuing each piece separately, says Wrather is worth $70 a share, vs. its $33.50 price on the American Exchange.

Most of Boyar's ideas hit him as he plods through 10K financial statements from several thousand public companies. But not always. He added Tiffany to his list after walking by its impressive New York show windows, and it was taken over by Avon—after protestations from the Tiffany chairman that he would never sell out. A gradeschool son put Boyar onto Scholastic Inc., which has magazines and a nearly proprietary school distribution network *(see Faces Behind the Figures, p. 146)*

What to do if you don't generate $16,000 in brokerage commissions and don't have the time to read 5,000 annual reports? Simply apply common sense before buying a stock just because it is hot. Acquirers do sometimes pick up technology companies, but rarely do they pay 90 times earnings and never do they ascribe any value to stock price momentum.

Look, for example, at the market's irrational treatment of Data General: Boyar put it on his list last year when it was trading for $6 over its $28-a-share net working capital. At that price, he figured, an acquirer could have had the computer business alone for almost nothing. The stock nonetheless fell to the low 20s. The final chapter: Boyar takes Data General off his list after it hits $67 in the current stock wave. "I don't know who is paying $67 for it," he says. "Probably the same people who wouldn't buy it at $24." ■

MONSTER STUDIOS PRESENTS

BUNNY LUGOSI

IN

A HARE-RAISING TALE OF TERROR, TYRANNY AND TIGHT-FISTEDNESS

BLOOD MONEY

FOR VIRTUALLY THE SAME READER:

LAYBOY COSTS	$59,318
ENTHOUSE COSTS	$36,960
OU SAVE	**$22,358**

he only difference between Penthouse and Playboy is rice! For Playboy you pay $22,358 extra. That includes a 5393 charge for bleed...that's blood money. Time, lewsweek and Sports Illustrated also charge for bleed... hat's blood money too! Penthouse doesn't have any bleed harge.

sk your Playboy rep (or any rep) to show you his printer's voice for "bleed." Since you've been paying all the bills ll along, you have a right to see. Chances are, however, hat you're wasting your time...chances are the printer oesn't even charge for bleed...and never has!

Vhat does that tell you?

22,358 is a lot of lettuce to pay for a media myth and 22,358 is exactly how much more advertisers are spend-g for a page in Playboy. That's a tough way to treat a lient, especially in a shaky economy. Paying nearly two-hirds more for virtually the same reader (see comparison hart).

But Bunny Lugosi has long been engaged in these dark and spine-chilling practices...it's called "bleeding," as in "bleeding the client." Bleed charges could make a lot of difference to Bunny's survival.

What about yours?

COMPARISON CHART:

MEN 18-34	**PENTHOUSE**	**PLAYBOY**
MEN 18-34	66.8%	62.3%
HHI $25,000+	38.7	36.0
HHI $35,000+	20.3	18.6
PROF'L/MANAGERIAL	13.5	12.8
ATT/GRADUATED COLLEGE+	26.6	27.2
MEN 18-49	**PENTHOUSE**	**PLAYBOY**
MEN 18-49	91.1%	86.9%
HHI $25,000+	55.7	53.6
HHI $35,000+	30.9	29.7
PROF'L/MANAGERIAL	21.7	21.7
ATT/GRADUATED COLLEGE+	36.6	37.4
MEDIAN AGE	30.5	31.4

Now do you think we're just splitting hares?

PENTHOUSE

ANY OTHER ALTERNATIVE WOULD BE WASTEFUL

Source: 1983 Spring MRI Total male readers = 100% composition

What to watch out for in bank money market advertising.

In very small print like this, the banks have told you that their "fantastic" interest rates are only for a few weeks—if that long. You should also watch out for the *, which often tells you there are some penalties or that you will have to pay for certain services.

Much of the recent Bank and Savings and Loan Association advertising seems to be predicated on two factors:

1. Most of you will overlook the fine print.

2. Many of you will believe that their Money Market Accounts are the same as a Money Market Mutual Fund.

If you read this, you might be much wiser.

Did you know that Bank/S&L Money Market Accounts require a minimum of $2,500, and if you drop below that, you get only 5½% interest?

Did you know that you are prohibited from writing more than three checks a month?

Or, that if you withdraw your money even one day before the monthly calculation, you could lose that whole month's interest?

Or, that some banks discriminate—that is, pay higher interest to their preferred customers?

If you answered no to any of these questions, it's not surprising. They are the kind of facts that appear in the small print of Bank and S&L advertising.

And what's even more misleading is one word that appears all too often in *large* type, the word "Fund."

Don't be misled. Their Money Market *Account* is not a Money Market Mutual *Fund*. You should begin by understanding this difference.

A Money Market Mutual Fund pools your money with that of other investors to get high current returns. Your money is invested *only in the money market* in high quality short term securities.

With a Fund, you are actually a shareholder. And you and the other shareholders receive *all of the income earned by the Funds*, less modest operating expenses. A Money Market Fund must pay the same market rate to everyone and there is strict regulation by the U.S. Securities and Exchange Commission to make sure it does. Though Money Market Funds are not insured, they have an outstanding record of safety. And even more important, *Funds are no offering interest rates competitive with tho of Banks and S&Ls*

Now with a Bank/S&L, you a not a shareholder; you've only got a account there. They can use you money any way they choose—eve in making loans and investments *tha have nothing to do with the money mark* What's more, a Bank or S&L can pa whatever rate it wants to and the keep for itself any profit it doesn pay you. (That's why their intere rates have come down so much.)

There just is no guarantee that th interest a Bank or S&L pays you wi be a true money market rate, or tha you will receive *all* the income you money generates.

All aspects considered (includin those hidden in fine print), man investors will find they're better o now in a Money Market Mutua Fund. You can check this out b comparing your local bank or S&l offer against that of a particular Fun or two. Just call any Fund and ask fo its prospectus.

And just remember, for us in th Funds, the Money Market is not sideline.

It's where we invest your mone full time, every day.

A SAMPLER OF THE OBSCURE

Presented here, unedited, are ten small print examples taken from Bank and S&L advertisements. With little effort, one could certainly add to the list and, at the same time, gain interesting experience in Caveat Emptor.

Minimum opening deposit $5000.

*

Actual yield shown is obtained only if you were to invest for one year at the current rate. However, rate on this account cannot be guaranteed for longer than 30 days.

*

To realize this yield, principal and interest must remain on deposit at this rate for a full year.

*

Rates effective April 25, 1983 through May 2, 1983. Thereafter rates are set weekly.

*

Three checks to third parties, and three preauthorized transfers permitted per statement cycle.

*

*On days balance falls below $2,500, interest earned will be 5¼%.

*

This offer may be revised or withdrawn without prior notice.

*

Rates are subject to change without notice.

*

*Interest rates change weekly.

*

(Rate changes weekly, on Tuesday)

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AMERICA'S
MONEY MARKET MUTUAL FUNDS
The full-time professionals in the Money Market

Playing convertibles in a bull market.

BUSTED CONVERTS

By Ben Weberman

If you are about to buy stock, check to see if the company also has issued convertible debentures. It's another way to play the stock, and it has its advantages.

Convertibles became popular during the long stagnation of the stock market in the Seventies because of the bond-market "floor" they provided under the price, combined with an upside potential in the underlying common. But you pay a price for the assumed protection: These days, most new offerings carry conversion terms that require the common to advance 20% to 25% before reaching parity—i.e., the point at which the market value of the common, if converted, is the same as the market value of the debenture. If you would lose by converting, that's the conversion premium. You may lose out on some of the appreciation in the price of the underlying stock. Before last August, when the equity markets were more placid, almost every new offering had an initial conversion premium much lower than that 20% to 25%. Today's terms are far less appealing. But we are in a bull market, and what do you expect?

What looks good in converts right now? Nancy Westervelt, bond analyst at Merrill Lynch, thinks one approach is to look for the highest conversion premium you can find. These are the so-called busted convertibles that trade almost entirely as bonds because the common, for whatever reason, is selling very low relative to the conversion price. It means you are speculating on a massive future rise in the common, which doesn't look too likely in most cases. But it could happen and this is a way to gamble on its happening without taking the risk of buying the common. Meanwhile, you have the debenture's yield, which is far greater than the yield of the underlying common. If the stock goes down, the debenture continues to trade as debt.

In the current euphoria in equities, it's not surprising that there are few busted convertibles around. Westervelt used a computer to analyze the 68 issues that seemed most likely to fit the category. She came up with only five that qualify. One is the 11s of 2007 issued by insurance broker Alexander & Alexander Services, which took a $40 million charge last year because of inadequate reserves in a subsidiary. A&A common would have to appreciate by 75% to reach parity, hardly likely for a company currently not rated by either Moody's or S&P's.

A busted convert with greater appeal is *Hughes Tool*'s 9.5% debentures, due 2006. The underlying common sells at about 20, far below the conversion price of 47⅛. Hughes is a solid company suffering from the current stagnation in oil drilling. If you are hopeful about the long-term prospects of a recovery in energy service stocks, here's why it could be smart to buy the convertible instead of the common: Recently priced at 92, it yields 10.3% to maturity, a respectable return for an A2/A-plus-rated debt issue, while Hughes common currently carries a dividend yield of only 3.42%.

Another busted convert: *U.S. Steel*'s 5¾s of 2001. The underlying common must appreciate 60% to come up to conversion parity. Is the stock of any steel company going to do that well? You decide. But in the meantime the convertibles, rated Baa1 and BBB, carry a 9.15% yield against 4% for the stock.

Not everyone agrees with Westervelt that busted convertibles are the way to go right now. In the same shop, Merrill Lynch bond analyst Preston M. Harrington, for example, takes the opposite tack. He likes convertibles in which the underlying common is well rated and conversion premiums are low. The appreciation potential for the debenture is close to that of the common. Instead of trading almost solely like a bond, as in the case of busted convertibles, these debentures swing with the common. But their yields—though lower than straight debt issues—are still higher than that of their associated common. And they have downside protection.

Harrington likes *American General* 11s of 2007. They recently sold at 133 to yield at 8.3%, compared with 3.5% in dividends for the underlying common. The conversion premium is minimal—7%—so the debenture price should move almost in step with the stock price.

Corning Glass Works' 8¼s of 2007, convertible into shares of *Owens-Corning Fiberglas* common, is another debenture with little conversion premium. Rated A by S&P's, the issue has a 6.7% current yield, 2½ times the common's dividend yield. Other low-premium convertibles on Harrington's list are *Deere & Co.* 9s of 2008, *Lomas & Nettleton Financial* 9¾s of 2008 and *Viacom International* 9¼s of 2007.

A note of caution: Be careful about call protection. The increased popularity of convertibles has encouraged issuers to see what they can get away with. In 1981, three-year guarantees against call were common. Now some issuers extend no call protection, and many specify that whenever the common trades 150% above the conversion price, the debenture can be called. Which means that you get taken out of the convert when the company wants, not necessarily when you want. ■

Ben Weberman is economics editor of FORBES *magazine.*

A market reaction is likely. Question: How does one protect oneself?

COMING DISTRACTIONS

By Ann C. Brown

Over the next several weeks a number of announcements will be made, each of which could knock a couple of hundred points or more off the DJI in a big hurry. For example, if the White House decides *not* to reappoint Paul Volcker as the head of the Federal Reserve and chooses anyone other than Alan Greenspan as his successor. Wall Street considers the Fed chairman the second most important person in the country and doesn't take lightly changes of leadership in this powerful post.

Then there's the little matter of the presidency itself. The stock market has been charging onward and upward, 99 44/100% sure that Ronald Reagan will 1) run again and 2) win. Should Mr. Reagan decide to retire to the ranch, look for a 200 million-share day and a record drop in the averages. Whether or not the Republicans could scurry around and field an unbeatable team is doubtful. For whatever reason, should a liberal become favored to occupy the Oval Office, 1984-88, look for inflation fears to rise and stock prices to fall.

But suppose it is either Mr. Volcker or Mr. Greenspan at the Fed and that Mr. Reagan decides that anything octogenarians Churchill and Adenauer could do for their countries he, a much younger man, can do for America, then what else could deal the market a blow?

For one thing, it now appears that the economy, which was on a 5% slow recovery course, got a shot in the GNP in the second quarter and is currently growing at an annual rate closer to 7%. If this trend continues and translates into a corporate demand for money at the same time the Treasury is tapping the financial markets to meet the deficit, watch out. Interest rates will start to rise, threatening to abort the economic recovery unless the Fed runs the printing presses overtime—in which case it's Inflation Revisited. Either way the stock market stands to lose much of its recent gain.

Right now the market is looking for an excuse to go down, and eventually it will find one. Nearly every Big Name stock market strategist is on the side of the bears, and cautious and negative commentary pervades their speeches and writings. The stock market may literally be "talked down" by prophesiers seeking self-fulfillment.

Okay, investors, what's to do while the winds of Wall Street temporarily blow cold on equities? For openers, consider selling some of those hot o-t-c items whose multiples are 3 to 5 times the price of the stock. What went up in a hurry usually comes down even faster. Particularly vulnerable are some of the new issues that came to market over the past several months at prices discounting earnings well into the 1990s.

Another way to protect yourself from a nasty downdraft is to place stop orders to sell below the market price. How to determine the level of stops is a debatable matter, but 15% isn't a bad rule of thumb, subject to revision depending on a stock' beta. High beta, higher stop percent age, and vice versa. And remembe to adjust the stops upward if th stocks rise.

Finally, you might think abou selling call options as a form of in surance policy on some of your prof its. This is a useful technique if you are trying to turn a short-term gai into a long-term gain. The premium you collect can help offset some o the decline if the stock does decline

If the market fades, sharp-eyed in vestors should be on the lookout fo buying opportunities in *Squibb* (47) *Gillette* (44) and *SmithKline Beckman* (67), all attractive companies dow from their highs, registered earlie this year, largely due to concern over lower-than-anticipated earnings from overseas operations Squibb, whose international activities account for nearly half its business, is expected to earn $3.45 pe share this year and $4.10 in 1984. Now unstuck from gum and candy since the sale of Life Savers, Inc. to Nabisco in 1981, Squibb is concentrating its efforts on developing and marketing medications and has several promising new products. Earnings are expected to grow 20% per year for the next several years, which is a higher rate than in most drug companies.

In Gillette's case, foreign operations provide over 50% of sales and earnings. As a result of the unprecedented strength of the dollar, analysts have been shaving 1983 earnings estimates from $5.25 per share to $4.85 or so. Next year's predictions range from $5.60 per share to $6.25, depending on what the dollar does, and when.

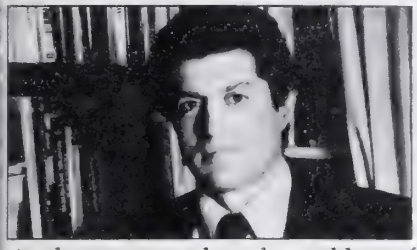
If the stock market has given you ulcers over the past few years, chances are your doctor ordered Tagamet, the world's number one prescription drug and SmithKline's nearly billion-dollar bestseller. However, if the July debut of the new anti-ulcer drug Zantac of *Glaxo Holdings ADR* (13) is as successful as some observers predict, SmithKline Beckman may end up swallowing a lot of Tagamet itself. However, SKB has one of the best R&D programs going and is on the verge of launching several new products. Earnings estimates for 1983 are for $6.25 per share and $7.10 to $7.15 for 1984 if Tagamet hangs tough. ■

Ann C. Brown is chief executive officer of the equity advisory and portfolio management firm of A.C. Brown & Associates

In computers, think of the programmer as an increasingly expensive middleman. Is the middleman on the way out?

ZAP, ZAP, I'M RICH

By Srully Blotnick



As they contemplate the problem of how to make a living when they finally enter the real world, many of today's young people are taking inspiration and guidance from reports like the ones featured in the cover story of this issue *(beginning on p. 93)*. The computer software pro—free soul of the Space Age and swimming in big bucks—is something of a folk hero. I sense a dangerous trap here for lots of youngsters. Let me tell you why.

Selecting a college major is the first step in choosing a career path, and it should surprise no one that the students I survey annually tell me that they dream of using their profession to wow the world.

In this regard, there is an acid test adolescents employ subconsciously in deciding whether their choice is correct; namely, it should make adults view them with awe and respect. If a profession is the right one, it should have the power to intimidate elders. What better than high technology, in which few older adults feel truly at home?

There's a problem, though. For most students, math, science and engineering courses are difficult, and grow more so each year as the material becomes more advanced. You must have a real interest in the subject matter not only to become immersed in it in the first place but also to avidly seek still more contact with it year after year. Mastery of these disciplines takes many years; no quick and easy public victories here. The entire undergraduate and most of the graduate curriculum in each major is devoted merely to preparing the student to examine and understand the central problems of the field.

Can students who yearn to go high tech and wow the world do so while sidestepping math, science and engineering courses? They think they can. In fact, they are certain they have found a miraculous shortcut: Study computer software. Learn computer languages. In retrospect, the Seventies and early Eighties will be seen to have been a period in which tens of thousands of students who in former decades would have majored in one of the liberal arts became high-tech groupies and chose computer science instead for its bragging value.

No doubt the interest of the majority of students in the field is genuine. However, for many I've been monitoring it represents a deliberate shift away from literature, history and politics (areas that are dismissed as "too weak") to something that smacks to them of mighty high tech—with the tech part quietly removed. They are studying language, the language needed to talk to a machine, but that's not how they want you to view it. For these students are intent upon having their most pressing adolescent fantasy come true: They want to be able to breathe fire, spouting something that sounds technical and scientific, not merely linguistic, while avoiding math, science and engineering education. No wonder they keep repeating, "Without software, hardware is just useless iron." This is the defensive song of those who want to be high tech without the long effort it takes to become truly high tech.

However, the students pouring into programming courses, and who tell me that this assures them a lucrative occupation forever, are in for a huge surprise, one that will be handed them in coming years by people whose training includes both physics and/or electronics engineering on the one hand *and* computer science on the other. As Glen Myers, manager of Microprocessor Architecture at Intel, puts it, "The cost of software has become a major obstacle to the growth of computing." In his excellent new monograph, *Advances in Computer Architecture*, second edition (John Wiley, $52.50), Myers goes on to explain that current computer systems simply have too large a "semantic gap"—that is, the distance between programming languages and machine architectures that carry out those instructions.

The students I've surveyed are convinced that the problem will be solved by throwing ever more programmers into the battle. They are wrong. That solution is too expensive even now, too labor-intensive. The designers of computer architectures, not only at Intel but at Motorola and Texas Instruments as well, see a solution that involves a dramatic reduction in the need for expensive programmers. They compare this to Detroit and Japan delivering cars that require substantially reduced maintenance. Changing computer hardware designs to minimize the need for programmers (by making programming *much* easier) is their chief goal.

The implication for parents and students is clear: Don't bank solely on programming. Keep in mind that a knowledge of microelectronics will be increasingly valuable, if for no other reason than to keep up with coming developments. Cost pressures associated with programming alone guarantee that important hardware innovations will soon be introduced. Don't be mesmerized by stories about baby software tycoons; it's one boom that the next big advance in computers intends to—indeed, must—stop. ■

Dr. Srully Blotnick is a research psychologist and author of Getting Rich Your Own Way *and* Winning: The Psychology of Successful Investing.

The market is ready to react all right, but don't look for just a brief reaction.

MAXIMUM AGONY

By Richard B. Hoey

The stock market will always do whatever is necessary to aggravate and frustrate the maximum number of portfolio managers. This market axiom never fails. I call it the principle of maximum agony.

A classic example occurred in the summer of 1982 when stock portfolio managers held on to their huge cash positions with the market below 800 because some Wall Street guru told them that there had to be a "classic selling climax" before the bull market could begin. They are still waiting because Paul Volcker eased monetary policy and set off the bull market without waiting for the climax. Investors have been scrambling ever since to get their cash to work.

A more recent example is what is occurring today. Most of the portfolio managers I talk to keep looking for a "buyable correction." They are hoping the stock market will have a quick, sharp correction that will give them a chance to buy and then immediately validate their judgment by surging back to new highs.

The problem with this scenario is that it's inconsistent with the principle of maximum agony; it's too easy. So, in my view, we will get either no meaningful correction at all or a painfully long, slow correction, with month after month of soggy stock markets.

My guess is that a *long correction* is in the cards. Investors will buy in the early stages, thinking they were given a second chance, but they won't get instant gratification. They will just see their stocks drop an eighth of a point a day, month after month, until they begin to mumble that maybe the bull market is all over. Only then will the second wave of the bull market begin. After the portfolio managers have suffered maximum agony.

What will cause such a long correction? I don't know for sure. But most of the stock portfolio managers I talk to expect further declines in interest rates. But that hope runs against the cyclical precedent. In six out of eight of the postwar business cycles, the final cyclical low in rates occurred within the period three months before to five months after the business cycle trough. May 1983 was the fifth month of this economic recovery, so that excessive confidence that interest rates are sure to keep dropping may begin to fade soon. That could touch off the long-awaited correction.

So, what should the investor do? The historical record is that the bond bull market is often completely over by the fifth month of economic recovery, while the stock bull market continues much longer. Therefore, a strategy of shifting from bonds to stocks at this point has some appeal. But with the Dow Jones industrial average over 1200 and long-term government bonds yielding slightly less than 11%, this may be the wrong time to execute such a strategy switch. While there's more potential for gain in the stock market than in the bond market over the next year or two, there's also a higher risk of loss in the stock market in the next few months.

And yet I am not a pessimist. Quite the contrary. I do not agree that this recovery will be much less powerful than the historic average. I believe that I am the only economist at any of the major brokerage firms who has consistently forecast all year long that the pace of economic recovery between the fourth quarter of 1982 and the fourth quarter of 1983 will average out to about 6%, nearly twice as fast as the consensus at the beginning of this year. I believe that the evidence is now accumulating that our view may prove correct.

In its own way, the stock market knew it all along. That's one reason the Dow Jones industrial average exploded from below 780 in the summer of 1982 to over 1200 today. But this means the first phase of economic recovery has been substantially discounted. That's why I'm predicting a period of soggy markets while the economy catches up with the market.

Under these circumstances I like railroad stocks. This industry has been out of favor on Wall Street for about the last 50 years. It is invulnerable to Japanese competition and it will be a major beneficiary of economic recovery.

One of my favorite stocks among the major rails is *CSX* (70). CSX is a combination of the old Chessie System and Seaboard Coast Line Industries. It has tremendous operating leverage, which hurt its earnings in 1982, but this operating leverage can work in its favor in the next few years. Each percentage point improvement in its operating ratio is worth more than $1 per share in pretax earnings.

On current accounting, CSX should earn about $9 per share in 1984. But the Interstate Commerce Commission has issued an order requiring all railroads to shift from betterment accounting to the more generally accepted depreciation accounting. As a result, actual reported earnings in 1984 are likely to be close to $11.

Another cyclical stock I like is *U.S. Steel* (27). Earnings per share should swing from a loss of about $4 last year to a profit of about $2 this year and a profit of roughly $4 to $5 next year. ■

Richard B. Hoey is chief economist and member of the Investment Policy Committee at A.G. Becker Paribas.

In today's nervous stock market, should you...

Buy? Sell? Do Nothing?

More specifically, what should you do NOW about these (or 1700 other) fast-changing stocks?

ER. EXPRESS	EXXON CORP.	OCCIDENTAL PETROLEUM
ER. TEL. & TEL.	GEN'L MOTORS	PROCTER & GAMBLE
KER INT'L CORP.	GTE CORP.	RCA CORP.
EING	INT'L BANKNOTE	SYKES DATATRONICS
LGATE PALMOLIVE	INT'L BUSINESS MACH.	TANDY CORP.
NT'L TELECOM	JOHNSON & JOHNSON	WARNER COMMUNICAT.
ESSER IND.	MERRILL LYNCH & CO.	XEROX

/e picked the 21 stocks above for tration—from more than 1700 regularly red by The Value Line Investment ey—because each has recently been ne "most active" list and may therefore f special interest.

stock market, and the investment es therein, are now going through a t deal of rapid change. *This is no time to n your hands.* It is urgent, we think, that check without delay every stock that in-sts or concerns you to see if it currently s the investment credentials most im-ant to you. To illustrate, let's look at the ks listed above:

RFORMANCE: Every one of these ks—*at one time or another*—has offered prospect of superior relative price per-ance. Right now, however, Value Line gs suggest that 7 of these stocks should voided for the time being. On the other d, we estimate that 7 of the stocks above clearly outperform most other stocks in next 12 months.

FETY: 10 of the stocks listed carry erior Value Line ratings for Safety, ning they have typically demonstrated ter price stability than the majority of ks. The other stocks on the list rate only age or lower on this score.

LD: The dividend yields of these ks estimated by Value Line for the 12 ths ahead range all the way from Nil to %. Fifteen of the stocks offer yields w 6.0%. Only 7 stocks provide yields of r higher.

PRECIATION: Value Line's es-tes of Appreciation Potential in the next 5 years for these stocks range all the from 10% up to nearly 200%. Five ks offer long-term potentials of 150% or er.

data above come from the issue of 83 The Value Line Survey. For actual stment decisions, be sure to see the t weekly Value Line edition.)

ERE ELSE CAN YOU GET ALL IS?

e Line gives you the key ratings outlined /e, updated every week, for EACH of stocks—so you can make *coherent* parisons of any stock against any rs with respect to the investment at-tes you care about. In addition, Value regularly presents comprehensive full-e Research Reports, with 15-year vital stics, for each of 1700 stocks. We apply same quality and comprehensiveness of arch and evaluation not only to virtually y "big name" stock (like the ones listed /e) but also to more than a thousand ser" stocks—which make up a signifi-part of a great many portfolios. We ze that when YOUR money is involved, an investment in U.S. FILTER can be just as important as the same amount in U.S. STEEL. If you want to re-assess your stock portfolio with an eye to greater rewards and/or lower risks in today's unusual market. . . . if you want to make *rational* decisions about what stocks to hold, sell, or buy now. . . . we believe that no other source even comes close to providing the help that Value Line systematically gives you.

UPDATED EVERY WEEK

Every week, Value Line's new *Summary & Index* presents up-to-date ratings of EACH of 1700 stocks *relative* to all the others, as follows. . . .

a) Rank for Probable Price Performance in the Next 12 Months—ranging from 1 (Highest) down to 5 (Lowest). We urgently suggest you *stay away* from the 400 stocks now ranked 4 or 5.
b) Rank for investment Safety (from 1 down to 5). If Safety is important to you, we suggest you concentrate on stocks ranked 1 or 2 in this respect.
c) Estimated Yield in the Next 12 Months. Every week we also present a "screen" of the 100 stocks with the highest yields, which ranged from 9.9% to 13.2% (Value Line 4/1/83).
d) Estimated Appreciation Potential in the Next 3 to 5 Years—showing the percentage change from the recent price. Every week we also present a "screen" of the 100 stocks with the highest potentials, which ranged from 125% to 445%.(Value Line 4/1/83).
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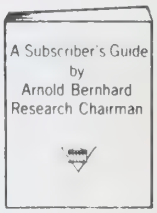

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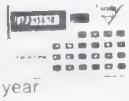

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So what's new in computers?

GIDEON'S GOSPEL

By Thomas P. Murphy

Gideon Gartner, 48, is an ex-IBMer, ex-security analyst and now president of the Gartner Group. The Group's franchise, and Gartner's specialty, is figuring out where the computer industry is going.

Gartner's old frenetic security-analyst style hasn't changed much from his Oppenheimer days. What has changed since he went into business for himself in 1979 is the resources he brings to the task: There are 80 people at the Gartner Group in Stamford, Conn., and 35 of them are professionals who spend all their time looking at the computer and telecommunications industries.

I caught up with Gartner when he was just back from California and the National Computer Conference and about to take off to visit clients in Europe. What impressed him at the conference?

"Over a hundred thousand people attended," Gartner says with awe, "a hundred thousand! There were 50 or more companies exhibiting microcomputers, and a half-dozen of those were portable computers."

What technology was outstanding? New gas plasma displays; flat displays that may one day supplant the ubiquitous cathode ray tube; minifloppy disks, 3 inches instead of 5¼; integrated software, or software that acts as a "shell" around several applications—the spread shee graphic display and word processin for example. This new software is s good and so easy to use, Gartner say that it will even overcome "techno phobia." That malady, in case you psychiatrist isn't keeping up, is th psychological aversion to new tech nology. To computer people, anyon without a terminal on the desk suffering from it.

Where is the growth in the indu try? Gartner broad-brushes it:

	1960s	1970s	1980
Mainframes	15%	13%	15%
Minicomputers	N/A	40	25
Microcomputers	N/A	N/A	50

As Gartner sees it, the microcom puter, with its incredible growt prospects, will create new market for the big computers, the main frames. As more and more peopl overcome their technophobia an their sophistication grows, the will want to go beyond microcom puters and access the data stored i the mainframes. Hence, the main frame business is slated to increas over this decade to the growth rate it knew in the Sixties. Caught in th middle, but still with respectabl growth prospects, are the minicom puter makers, DEC, Prime, etc.

As for the microcomputers (pe sonal computers), their growth rat through the end of this decade huge, 50% compounded. By 199 Gartner expects the microcompute alone will have sales of $30 billion . But it won't have 150 manufac turers or whatever the number ma be. There will be, Gartner says, " couple dozen manufacturers, and half-dozen of them will represen three-quarters of the business." he is right, there will also be a lot o sadder but wiser venture capitalist since most of these new microcom

Thomas P. Murphy heads a venture capital firm, Partnership Dankist, Stamford, Conn

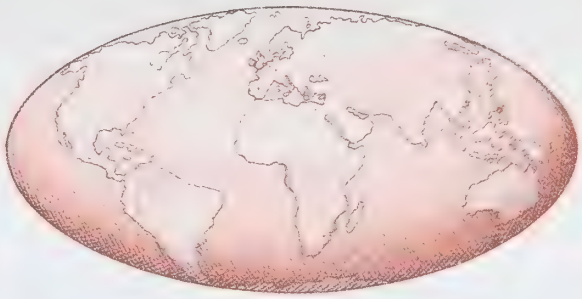
er companies were started with ture financings.

Vhat the Gartner Group thinks make a huge difference on Wall eet. The complexity of the com- er industry that used to frustrate leon Gartner as a security ana- is frustrating The Street as well. kers can't afford to hire 35 ana- s to follow the industry. One is re likely. As a result, the Gartner oup's opinions, marketed by the estment banking firm of Dillon, id & Co. as Dillon, Read Tech- ogy, have a lot of clout.

ast year Wall Street was predict- that Amdahl, the biggest of the g-compatible mainframe manu- urers, would earn $1 a share. tner stunned The Street with a cent forecast for the year along h a sell recommendation, at a e when the stock was about $32 nare. Over the following months dahl's stock drifted down to ut half of that price. And the cast turned out to be just about the money: Amdahl earned 24 ts a share last year.

Vhy was Gartner right and the ventional forecasts wrong? Am- l's results for 1982 depended on company's ability to ship 50 of new 5860 models during the r. Gartner analysts took the time check with Amdahl customers learned that few of them had firmed 1982 delivery dates. ey also learned that a key suppli- to Amdahl would have trouble eting delivery commitments. So vas not hard to figure out that dahl was not going to make the fit The Street expected.

Vith that kind of influence nes a problem for the Gartner oup. As it has grown from 0,000 in sales in 1979 to $8 mil- n this year, Gartner's customer e has shifted from Wall Street to lustrial companies, including rly every major computer com- y. This leaves Gartner in the asionally awkward position of ning pessimistic reports for com- ies that are major customers of service. Amdahl was a case in nt. "Companies," says Gideon tner, "may not like what we say, sophisticated managements ow that businesses have their ups downs." Case in point again: dahl. It is having an excellent r in 1983. ■



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The opportunity to kill inflation and restore moderate rates was botched. From now on, they will be rising again.

TURMOIL AHEAD

By Ashby Bladen

The next two and a half years will bring rising inflation and interest rates and a good deal of financial turmoil. The best way for institutional investors to cope is by staying liquid and protecting their financial reputations at all costs. Those are the main conclusions I reached in the forecast that kicks off my company's annual planning process. And my scriptural injunction to individual investors is: Go thou and do likewise.

Why am I so sure that the precipitous drop in inflation and interest rates is over and that they have begun another long climb upward? Because I see our national policymakers repeating their mistakes—the same mistakes they have made over the last several decades.

Ever since the 1930s, official policy has aimed at preventing a recurrence of deflation, but it has also mistaken the most obvious symptom of financial disorder for the underlying cause. It considers the problem simply to be the inability of overextended debtors to refinance their debts.

That's backward. The real problem is the excessive borrowings that made refinancing necessary. After two decades in which borrowing in order to buy inflation hedges has usually paid off and only the most recklessly enthusiastic hedgers have been seriously hurt, the only way to restore price stability is through a financial crisis that scares everybody back into lasting prudence with respect to borrowing and spending. But again and again the Fed goes to the brink and then pulls back.

Every time the Fed pushes the market to the brink of this situation and then backs off, the severity of the crisis that would be required to reestablish its credibility rises exponentially. I believe that in 1966 just a few more weeks of slumping bond prices would have done the trick. But the Fed panicked first and flooded the market with borrowable reserves.

Its nerve held out longer in 1970 and again four years later, but each time it eventually caved in. And each time the market's confidence that it would not be pushed over the brink to the financial crisis was reinforced. After a good bit of this, gambling on renewed inflation became not a gamble but virtually a sure thing.

Until last fall it was reasonable to hope that our financial policymakers would not make the same mistake four times running. If they had not, then the combination of the worst recession in the postwar era, unprecedentedly high interest rates and a record number of personal and corporate bankruptcies, would finally have broken the inflationary fever. That, in turn, would have tended to restore the kind of moderate interest rates that are compatible with stable and sustainable prosperity.

Unfortunately, the policymakers did make those mistakes all over again. By now it has become obvious that all the pain and suffering that the recession caused have gone for naught. The Fed has backed away again. Should the Fed ever try to reestablish its credibility, it would take years of stringency to convince the market that this time it really meant business. Meanwhile, the federal government is setting the rest of us a particularly horrible example by borrowing and spending at a record rate.

Thus official financial policies in the U.S. are at least as inflationary as they have ever been. The next question is whether they will lead to new peaks in both inflation and interest rates in the near future. Of that I am not sure. Something new has entered the picture and that is why, for the time being, I am predicting turmoil rather than the certainty of hyperinflation.

The new factor is this: Our interest rates are already high enough to be attractive to foreigners. The consequent demand for dollars for lending here has pushed the foreign exchange value of the dollar so high that our exports are very expensive abroad and imports are cheap in this country. Most Americans understand that the overvaluation of the dollar is causing unemployment and holding back the economic recovery, but they do not see so clearly that it is also the main reason our inflation rate is so low.

I do expect the dollar to weaken somewhat, but it will not be by enough to permit either a robust recovery or a serious resurgence of inflation. However, after 1984, another Administration may attempt to speed the economic expansion by driving down the dollar, as Roosevelt and Morgenthau did in 1934. That would send inflation and interest rates through the roof. For now, however, I look for a strong dollar to weaken both recovery and inflation—a mixed blessing.

Barring such an abrupt about-face of policy, my best guess is that the Consumer Price Index will rise 5% this year, 8% in 1984 and 10% in 1985. That should produce yields on long-term U.S. government bonds averaging 11% this year, 12% next year and 14% or more in 1985. If these guesses turn out to be wrong, I suspect that they will err on the low side. Reason enough to maintain a high degree of liquidity. ■

Ashby Bladen is senior vice president for investments of the Phoenix Mutual Life Insurance Co. and author of How to Cope With the Developing Financial Crisis

A new computer study gives spread traders a tool none should be without.

A SPREADER'S BIBLE

By Stanley W. Angrist

Recently Jake Bernstein, a longtime miller in the commodity vineyards, completed a massive computer study of over 300 possible spread-trade combinations. The result of the study is a complete collection of charts. More important, it provides a computation of the probability of success for each week the spread was operative. Furthermore, his work estimated the risk and reward possibilities of each trade and specifically identified how many years' data went into each spread studied.

Now Bernstein's study has been published as *How to Profit from Seasonal Commodity Spreads* (John Wiley & Sons, New York). The book is also available from MBH Commodity Advisors, P.O. Box 353, Winnetka, Ill. 60093. At $60—less than a round-turn commission on most spread trades—the book has to be the biggest bargain available to spread traders today.

The book is not written for people who have never traded commodities. (That is, it presumes a certain familiarity with the terms used to place orders and the like.) But it does provide a set of rules for spread traders similar to the ones that have run in this column on a number of occasions.

Bernstein is a devoted student of cycles in commodity prices, as well as seasonal price movements. Not unexpectedly, he sought out the seasonal movements in spread prices. He has then taken as much information as is available and produced a single line chart that reflects the composite movement of each spread studied.

The vertical scale is an index of what the spread has done and provides some indication of the likely extent of the move, though it does not provide the means to gauge the dollar profit of a given trade. The reason for this is that the data have been normalized to reduce the effect that one or two outstanding good or bad years would have on the results of a spread.

The second feature of each spread chart is a percentage reliability number that quantifies the likelihood of the spread's widening for that week, based on what it has done historically. This is done by means of two sets of numbers along the bottom of each chart.

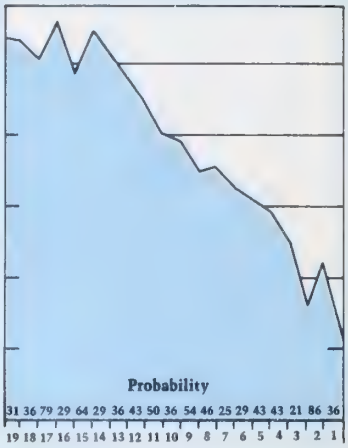
The bottom set of numbers indicates the weeks remaining before the nearest contract matures. The top set of numbers gives the seasonal probability for the spread's widening in that week. Therefore, it is easy to pick out those time periods when the probability numbers are large and there is thus a high probability that the spread will widen. Or conversely, if one is considering a bear spread, one would look for periods when the probabilities are small that the spread will widen, which is another way of saying the probability is high that the spread will narrow.

Let's consider the example shown in the chart. The spread is October versus December cotton. The chart shows that historically, during the last 19 weeks of the October contract's life, it falls in value relative to December. Indeed, in 15 of those 19 weeks the probability is less than 50% that the spread will widen. Hence it is a good bet that the spread will narrow. Bernstein says that history shows that this spread has a high degree of reliability and that it also has a high degree of profit and risk associated with it.

On the basis of history, then, one could buy December/sell October cotton, with December at no more than a 100-point premium. I would risk no more than 100 points on the spread ($500 per spread) from my entry point, and I would look for a 300-point profit ($1,500 per spread).

Odds-on favorite

From May until the October contract expires, October cotton has a tendency to weaken relative to December. The seasonal probability numbers show that the odds that the spread will widen are low, and thus smart traders would look to a bear spread in cotton. The bottom row tells how many weeks until the nearest contract expires.



Source: Jacob Bernstein.

The margin on this spread is around $750, while the round-turn commission is about $100.

Is Bernstein's book the Holy Grail that will produce untold riches for all who follow it? Of course not. There is no such grail, contrary to what you might receive in your mailbox. The book does offer you an opportunity to trade with the percentages in your favor. It is naive to expect to be able to do more. ■

Stanley W. Angrist is a commodity speculator, consultant and longtime observer of the commodity markets.

Those who sell now will regret it later.

RIDE IT OUT

By David Dreman

"Is this the time to pull the plug if you're a contrarian?" The question is put to me all the time these days, as the market boils ever higher and the Dow is up over 50%. My answer is no. It is not time to take profits and run.

Sure, a correction, perhaps a sharp one, might be directly ahead, if it hasn't already started. But if this is really a bull run—and I've written for several years that the market is badly undervalued—it will prove costly to sell now.

Look at the charts on this page of the bull markets of this century. They show, first of all, that true bull markets are few and far between. In fact, there have been only two major ones since 1900. Many readers have never seen one, and those who have must go back almost two decades. But when one occurs, fasten your safety belt. The gains are enormous. Stocks shot up fourfold between 1924 and 1929 and sixfold between 1949 and 1965.

This being so, is it worth the risk of missing a gain of possibly 100% or more to try and pick stocks off 10% cheaper? Not unless you're willing to take on a risk-reward ratio that could be 10- to 20-to-1 against you. The charts show just how much the Dow ran up before a major correction. From May 1924, for example, the Dow rose almost 80% in 19 months before its first significant setback. And between 1949 and 1952 the market moved up 75%, with corrections of about 10% along the way. Finally, some of the corrections that did take place happened in almost the blink of an eye. In 1953 the Dow dropped 13% from January to September, with much of the drop coming in August and early September. That didn't give investors much time to move from fully invested, to cash and back again. Anyone who tried to do so risked watching from the sidelines with a bag of cash while the market doubled in the next 2½ years.

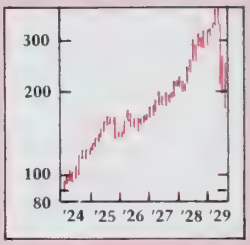
In markets like this, I'm convinced it's far more dangerous to be out than in. First of all, the record of market bottom pickers has been anything but great—one recent study of 600 institutional timers showed only 6% had any success in picking bottoms. As I wrote last August just prior to the market's explosion, "Granted it's a tremendous ego trip to catch a market bottom; the chances for making money at it, however, are not really much better than those for getting profits playing three-card monte. Bull markets, as past experience indicates, seem to come out of nowhere, and at times when people are heavily cash-laden, waiting for the next hundred-point downswing."

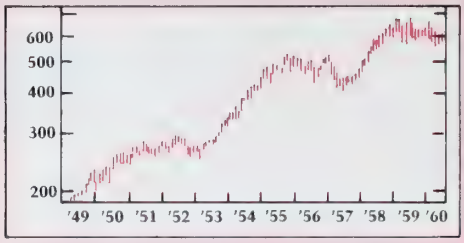
The fact is, the Dow still looks cheap. At the beginning of the rally last August, adjusted for inflation it was at the same price as at the end of 1932—the bottom of the Great Depression. Moreover, corporations survived the troubled Seventies far better than most people would have anticipated. Pretax profit margins for the S&P's 400, for example, were almost the same as they were in the halcyon Fifties, while return on equity and earnings growth were substantially higher. Add to this the disillusionment by millions with investments ranging from bank deposits and bonds to precious metals and collectibles (all of which created an instant meltdown of capital in the Seventies), and you can see why stocks might prove very attractive again.

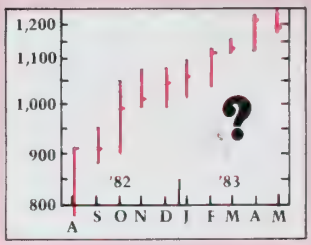
I may have some egg on my face if there is a sharp correction. But, even now, buying good-yielding, strong, low P/E stocks should allow me to come out well ahead over the slightly longer term. ■

Chasing the bull

Bull markets are hard to come by, as these charts demonstrate. There have been only two major ones in the 20th century, with minor corrections between their tops and bottoms. Since picking bottoms is something less than an exact science, my suggestion is that you not try to answer the question posed in the last chart.





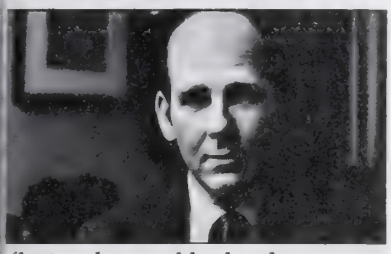


David Dreman is managing director of Dreman, Gray & Embry, Investment Counsel, New York, and author of The New Contrarian Investment Strategy.

'ejoice, inflation is going to stay down. 'ut don't relax, we still have to cope.

WILL THE REAL MANAGERS STEP FORWARD?

By A. Gary Shilling



ıflation has suddenly almost van-hed from the U.S. economy. Over-ıght, it seems an era has ended, the a when managers easily passed on ıeir costs and customers accepted ver-rising prices as a fact of life. ıflation's abrupt halt is a welcome ıt mixed blessing for many com-ıies. It spells the end of the mar-elous game of watching assets in ıe ground, such as oil, rapidly ap-reciate in value. It kills the strate-y of owning inventories and other hysical assets on a highly lever-ged basis.

What's a manager to do? Tough it ut and assume inflation will come aring back? Or acknowledge that ıe business climate has undergone change too big to ignore? It's my iew that he or she had better do the ıtter if he or she wants to survive. 'he old game's over. For a long time come, the inflation rate may stay own at 2% or 3%. That calls for a ery different kind of business be-avior than when we had double-igit-and-rising inflation.

In this new climate, there's no ıore postwar catch-up or inflation cover the usual multitude of cor-orate sins. Nor is borrowing to buy ıore assets a workable plan. Now 's time for the real managers to step forward. They need a new, tough-minded strategy. At the very least the new tactics involve the following elements:

1) *Ruthless and permanent cost control.* Low inflation means that costs cannot be easily passed on. Managers need to develop long-range cost control programs. For example, they should not simply fire people while retaining their positions on the organization chart. Instead, they should reorganize or combine departments, eliminate positions and redraw the charts.

2) *Volume expansion.* Growth in volume is a key to growth in earnings. What are the attractive areas for such growth? They include autos, housing, labor-saving equipment, defense, and goods and services for high-income people, such as airlines and financial services.

3) *Adaptation to high real interest rates.* High real rates are here to stay, along with a narrower spread between short- and long-term rates. Investors are recouping their losses after the negative real interest rates of the late Seventies. What's more, the Fed isn't likely to hold down short-term rates to promote high growth and employment. Thus managers need to reduce short-term borrowing for inventory and accounts receivable, which will be much more costly in real terms than it has been in the recent past.

4) *Emphasis on the long term.* Maximize long-range performance, not short-term profits or financial manipulation. It's no longer "in" to speculate in companies as if they were portfolios of financial assets to be bought and sold at will. Besides, the strength of the stock market means that corporations no longer come cheap. Production and marketing people, instead of financial wizards, should begin to dominate again in the executive suites.

5) *Avoidance of tangible asset plays.* With real interest rates high and appreciation on plant sites, inventories and other tangibles low, it doesn't make sense to buy these assets any sooner than necessary.

6) *Acceptance of deregulation.* Government is pulling out of the economy. Deregulation will continue, and bailouts by Uncle Sam are no more. Once-protected industries now face the bracing winds of competition. And just compare Chrysler's bailout under President Carter to International Harvester's more recent and very painful self-liquidation.

7) *Difficult international business conditions.* The strong dollar should continue, making U.S. exports less competitive. With foreign countries desperately trying to reduce unemployment, U.S. companies are competing not just against foreign companies but against foreign countries. In some cases, it may be best to shift assets to more attractive areas of investment where foreign competition is less deadly.

8) *Emphasis on financial strength.* It's tempting to go all out for market share, since that's often the key to growth and profits. In an uncertain world, though, financial strength should not be compromised. This advice might seem to conflict with my recommendation concerning volume expansion. The point is that leverage is out. Healthy balance sheets are in.

And, finally, don't weep for the old days. Inflation wasn't all that good a game for most businesses anyhow. Inflation created the illusion of steady growth in sales and earnings. In fact, corporate performance was eroding badly. In 1965, for example, a super year for profits, the aftertax earnings for the S&P's 400 equaled 12.6% of equity. By 1979 the numbers looked even better—16.5%. After adjusting for the effects of inflation, including inventory profits and depreciation, however, the 1979 ratio was –1.8%. Now we should be seeing positive rates of return again. But business people will have to earn them. I have outlined eight winning elements they might adopt. In future columns, I will show specifically how managers can make these elements work for their businesses. ■

Gary Shilling, a guest columnist, is presi-ent of A. Gary Shilling & Co., Inc., a New ork economic consulting firm. He is author f Is Inflation Ending? Are You Ready?

Forbes/Index

Index of companies covered in news stories and by the columnists in this issue.

Afco ... 33
Airborne Freight ... 40
Airbus Industrie (France) ... 51
Alexander & Alexander Services ... 167
AMC ... 130
Amdahl ... 173
American Airlines ... 51
American General ... 167
Apple Computer ... 136
Arby's ... 144
Arco ... 35
ASK Computer Systems ... 98
Asset Analysis Focus ... 162
AT&T ... 46
Atalanta/Sosnoff Capital ... 42
Atwood Oceanics ... 42
Automation Consultants ... 98
Battelle Pacific Northwest Labs ... 8
Bear Creek ... 164
Beneficial Standard ... 162
Bessemer Securities ... 42
Boeing ... 50
Bristol-Myers ... 10
Bruce & James, Program Publishers ... 8
Burger King ... 144
Burroughs ... 130
Business Software House ... 100
Carolina Freight ... 58
Champion Intl ... 6
Chrysler ... 177
Cone Mills ... 164
Continental Telecom ... 46
Control Data ... 133
Convair ... 54
Corning Glass Works ... 167
CSX ... 170
Data General ... 164
Daylab ... 64
Deere & Co ... 167
Delta Air Lines ... 51
DesignWare ... 99
Diamond Shamrock ... 130, 156
Digital Equipment ... 35
Digital Research ... 136
Dillon, Read & Co ... 173
Doyle Dane Bernbach ... 74
Dun & Bradstreet ... 48
Electronic Arts ... 94
Emery ... 40
LM Ericsson (Sweden) ... 35
Exxon ... 35, 36
Fairchild Inds ... 46
Federal Express ... 40
Fidelity Brokerage Services ... 42
Fidelity Funds ... 159
First Chicago ... 12
First Federal Savings & Loan Assn ... 12
Ford Motor ... 84
Franchise Finance Corp of America ... 144
GAF ... 160
Gannett ... 18
Gartner Group ... 172
GE ... 48
General Dynamics ... 30
Gillette ... 168
Glaxo Holdings ... 168
Global Marine ... 42
Gulf Oil ... 144
Harcourt, Brace Jovanovich ... 100
Hardee's ... 144
Harper & Row ... 100
Health Information Systems ... 95
Hearst ... 10
DC Heath ... 140
Heidrick & Struggles ... 106
Hewlett-Packard ... 138
Hipotronics ... 60
Hughes Tool ... 167
E.F. Hutton ... 144
IBM ... 8, 35, 136
Independent Clearing House ... 34
Intel ... 169
International Harvester ... 177
ITT ... 35
Johnson & Johnson ... 162
Josephson Bag & Canvas ... 66
K mart ... 12
Kentucky Fried Chicken ... 144
Key Pharmaceuticals ... 162
Knight-Ridder ... 48
Korn/Ferry Intl ... 107
Kenneth D Laub and Co ... 70
Laventhol & Horwath ... 131
Lear Siegler ... 130
Lifeboat Assocs ... 94
Lockheed ... 54
Lomas & Nettleton Financial ... 167
Long John Silver's ... 144
Lotus ... 94
Louisiana Land ... 160
Maersk Line ... 30
Magellan Fund ... 159
Management Science America ... 94
Manufacturers Hanover ... 30, 146
McAuto ... 95
McDonnell Douglas ... 51, 95
Measurex ... 42
MEM ... 164
MicroRIM ... 99
Microsoft ... 136
Morgan Guaranty ... 30
Motorola ... 169
Muro Pharmaceuticals ... 162
Natomas ... 156
New York Times ... 42
Nigel Chattey Assocs ... 143
Norton Simon ... 10
ODECO ... 42
Oppenheimer & Co ... 42, 160
Oppenheimer Target Fund ... 14
Owens-Corning Fiberglas ... 167
Papercraft ... 12
PC Telemart ... 94
Peachtree Software ... 99
PepsiCo ... 10
Perini ... 164
Pickwick Rack Services ...
Pittston ...
Purolator ...
Quick & Reilly ...
Quick Brown Fox ...
RCA ...
Reading & Bates ...
Roadway Express ...
Rorer Group ...
Rothschild ...
Rowan Cos ... 42,
Royal Dutch/Shell (Netherlands) ...
Russell Reynolds ...
Sanders Assocs ...
Scandinavian Airlines Group ...
Schlumberger (France) ...
Scholastic ... 16,
Seagate Technology ...
Sears, Roebuck ...
SEDCO ...
Shared Medical Systems ...
Shugart ...
Simon & Schuster ...
Smith Barney ...
SmithKline Beckman ...
Sottsel Computer Prods ...
Software Dimensions ...
Squibb ...
St. Joe Minerals ...
Stone Container ...
Stride Rite ...
Sun Oil ...
Superior Oil ...
Taco Bell ...
Tandy ...
Television Station Partners ...
Texas Instruments ...
Thyssen-Bornemisza (Monaco) ...
Trans World ... 51,
Trico ...
United Parcel Service ...
US Steel ... 130, 167,
USA Software ...
Useable Software ...
Vanguard Fund ...
Viacom Intl ...
Visicorp ...
Vivitar ...
Wang Labs ...
Warner Communications ...
Waterman Steamship ...
Wellington Management ...
Wendy's ...
Western Co of North America ...
Western Union ...
Weyerhaeuser ...
Wheeling-Pittsburgh ...
Worldwide Courier Express ...
Wrather ...
Xerox ... 10,
Zapata ...
Ziff ... 145,
Zilog-Exxon ...

Do you know anybody who is somebody in business who does not read Forbes Magazine?

Forbes: Capitalist Tool

Flashbacks

Edited by Dero A. Saunders

The more things change. . . ."
ems from past issues of FORBES

ty years ago in FORBES

the issue of June 23, 1923)

ormer German ship Vaterland *made aiden U.S. voyage from New York as* eviathan *on July 4, 1923*

y do I feel that optimism is war-ed rather than pessimism? Here some important considerations: real purchasing power of Ameri-workers is today the greatest ever rienced and is unlikely to dimin-materially, in view of Washing-s antagonism to immigration law ges. Reports from mail-order ses and others catering to our agri-ural population show substantial-ncreased buying during recent ths, indicating that farmers can-be so badly off as sometimes rep-nted. The position of our banks never sounder. [The railroads] are he strongest financial position have enjoyed in a decade."

—Editor B.C. Forbes

e rich simply won't hand over 50 s of every dollar of their income to federal government in the form of me taxes. Neither would you nor I e were in their place. Since both ral and state governments invite zens to buy tax-exempt securities, no crime to do so. The drop in the nber of persons paying the federal on incomes of $1 million a year and ards from 206 in 1916 to 21 in 1921 reveals how widespread has become the diversion of income into securities free from taxation."

"**The relatively strong position** of public utility investments has not as yet been generally recognized in more official quarters. Thus we find that in those eastern states where laws specify the types of bonds which shall be legal for savings banks, very little recognition is given public utility issues. Indeed, in some states railroad bonds of really inferior character have sometimes been made 'legal,' whereas public utility issues which are entitled to the highest investment rating have been ignored entirely."—John Moody, Moody's Investors Service

"**Judge Gary** and other steel leaders did a bad day's work when they reported in favor of continuing the 12-hour day in the iron and steel industry. Such a backward attitude is not in harmony with the enlightened stand now taken by the majority of businessmen. . . . The 12-hour day is indefensible morally, it is indefensible domestically, it is indefensible politically, it is indefensible socially. It ought to be abolished."

"**The extensive art gallery** of German paper money will shortly be enlarged by two notable accessions. The Reichsbank is arranging to print 1,000,000-mark notes in response to popular demand. At present the biggest German monetary unit in circulation is the 100,000-mark note—about $1.30."

Fifty years ago

(June 15, 1933)

"**At the present time** the [Dow Jones] averages have penetrated anywhere from 2 to 6 points above our latest forecast objectives, as prophesied in the last two issues. . . . We still hold that an abrupt reaction for correcting a rapid advance may appear at any time, but we also feel that while such a reaction may be extremely sharp—perhaps even 5 or 10 points down on the averages in a couple of days—it would also be extremely short."

"**The net result** of the Senate's [securities industry] investigation, notwithstanding that [investigator Ferdinand] Pecora pursued extremely questionable tactics in seeking to excite suspicion where no legitimate grounds for suspicion existed, should be salutary. There is no adequate reason why private bankers, who sell securities to the public and in other ways exercise tremendous financial power, should not be subjected to governmental supervision and control as are other banks."

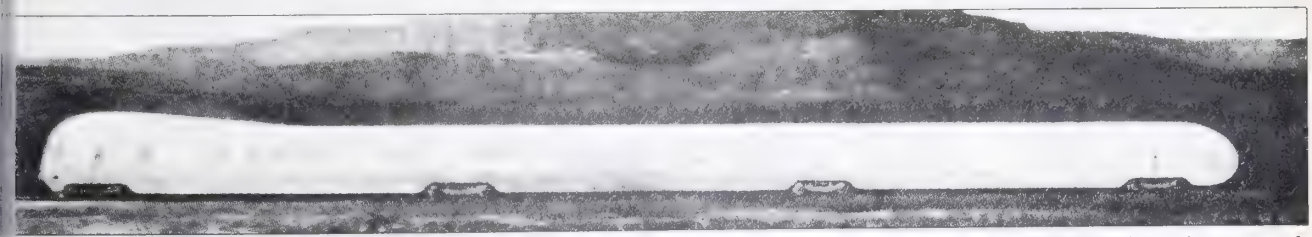
"**More than 130 trade associations** have already made tentative agreements for increased wages and, in many cases, shorter hours for labor as soon as business is somewhat stabilized. These coordinated plans will be stirred into action as soon as President Roosevelt signs the Industrial Recovery Bill. Industrialists who have been consulting with General Hugh S. Johnson, administrator of the proposed law, believe that 3 million now unemployed will be put back to work by Oct. 1."

"**A federal deficit** of about $1.7 billion is indicated for the year ending June 30, with expenditures reduced by $1 billion or more and receipts increased about $100 million as compared with the previous year. The public debt at the end of May was $21.9 billion, an increase of $2.8 billion in a year."

Twenty-five years ago

(June 15, 1958)

"**Sales of transistors** this year may top 1957's record $70 million by a good $30 million, industry sources estimate. So far in 1958, production is up 88%, reflecting in part the tremendous changes the tiny devices (which take the place, in far less space, of vacuum tubes) are making in electronic circuitry."



Union Pacific had on order in 1933 this air-conditioned, streamlined aluminum train capable of 110-mile-an-hour speed

Thoughts
on the Business of Life

Man really knows nothing save what he has learned by his own experience.
CHRISTOPH M. WIELAND

The ultimate goal of the educational system is to shift to the individual the burden of pursuing his own education.
JOHN GARDNER

All genuine progress results from finding new facts.
WHEELER MCMILLEN

Who supplies another with a constructive thought has enriched him forever.
ALFRED A. MONTAPERT

The whole art of teaching is only the art of awakening the natural curiosity of young minds.
ANATOLE FRANCE

All that is good in man lies in youthful feeling and mature thought.
JOSEPH JOUBERT

The best cure for a sluggish mind is to disturb its routine.
WILLIAM H. DANFORTH

Intellectual blemishes, like facial ones, grow more prominent with age.
LA ROCHEFOUCAULD

The more we study, the more we discover our ignorance.
PERCY BYSSHE SHELLEY

Education is an admirable thing, but it is well to remember from time to time that nothing that's worth knowing can be taught.
OSCAR WILDE

Vitally important for a young man or woman is, first, to realize the value of education, and then to cultivate earnestly, aggressively, ceaselessly, the habit of self-education. Without fresh supplies of knowledge, the brain will not develop healthily and vigorously any more than the body can be sustained without fresh supplies of food.
B.C. FORBES

Reading is to the mind what exercise is to the body.
RICHARD STEELE

The richest soil, if uncultivated, produces the rankest weeds.
PLUTARCH

The man who never alters his opinion is like standing water, and breeds reptiles of the mind.
WILLIAM BLAKE

You can lead a boy to college, but you cannot make him think.
ELBERT HUBBARD

I am now past the craggy paths of study, and come to the flowery plains of honor and reputation.
BEN JONSON

More than 3,000 "Thoughts," indexed by author and subject, are available in a 574-page book at $12.95. Send check and order to: Forbes Inc., 60 Fifth Ave., New York, N.Y. 10011. Add appropriate sales tax on New York State orders.

Science gives us knowledge, but only philosophy can give us wisdom.
WILL DURANT

There is nothing so stupid as an educated man, if you get him off the thing he was educated in.
WILL ROGERS

We have an infinite amount to learn both from nature and from each other.
JOHN GLENN

It is no good to try to stop knowledge from going forward. Ignorance is never better than knowledge.
ENRICO FERMI

Knowledge without wisdom is a load of books on the back of an ass.
JAPANESE PROVERB

A Text . . .

Behold, I have set before thee an open door, and no man can shut it.
REVELATION 3:8

Sent in by Betty L. Chalfont, Mt. Prospect, Ill. What's your favorite text? *The Forbes Scrapbook of Thoughts on the Business of Life* is presented to senders of texts used.

It is the studying that you do after your school days that really counts. Otherwise, you know only that which everyone else knows.
HENRY L. DOHERTY

A diploma is evidence of our competence. Sometimes it's the only evidence.
CULLEN HIGHTOWER